

Gilles  
Deleuze and the  
*project* of  
architecture:  
**an expressionist  
design-research  
methodology**

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'I, Stefan Robert White confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.'

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For Bob and Gilles

# Abstract\_

## Gilles Deleuze and the *project* of architecture: an expressionist design-research methodology

This thesis analyses the potential of the Deleuzian philosophical concept of 'expressionism' in accounting for *and* driving architectural design and research. An expansive literature considering the import of Deleuze in architecture is characterised by his simultaneous use in *both* poles of debates concerning Critical architecture at the centre of mainstream practice *and* as foundational source for minoritarian approaches to both design and research. Identifying this contemporary vacillation as a reiteration of traditional reductions of design to products *or* processes, and seeking development of an alternative trajectory, I propose the architectural *project* as an 'embodied' epistemological *and* ontological third term of an expressionist account of architectural design-research. A series of critical encounters between philosophy and architecture exploring the accounts and practices of Robin Evans, Rem Koolhaas, Peter Eisenman and both professional and pedagogic design-research undertaken by the author, articulate six key principles of a non-representational, expressionist methodology for design and research in architecture.

First 'expressionism' insists on a substantive distinction between *nominal* and *real* denying any essentialist component to architectural products or production. An encounter with Evans shows how architectural bodies both produce and are constituted by 'projective relations' *external* to architect, drawing and discipline. Koolhaas and Eisenman's divergent positions then demonstrate how projective distinctions are always embodied in two actual forms which select *content* and *express* an exterior. Fifth, a design for a non-



human 'client' makes explicit the parallel and serial nature of processes of selection and projection. Sixth, community-engaged design-research demonstrates that active speculation towards positive change (outside of self and social habit) is a mechanism for the serial production of simultaneously ethical *and* aesthetical affective relationships. Extending and sharing the production of capabilities and powers of expression beyond the architect and architecture demonstrates the overarching principle of expressionism - *affirmative speculation is correlative with the creation of ethical joy.*

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# Introduction\_ A triad with two forms

[...] we must return to what is common to Leibniz and Spinoza, to the use of the notion of expression which presents the whole force of their Anti-cartesian reaction. This notion of expression is essentially triadic: We must distinguish what expresses itself, the expression itself and what is expressed. The paradox is that '*what is expressed*' has no existence outside its expression, bears no resemblance to it, but relates essentially to *what expresses itself* as distinct from *the expression itself* [...]. This constant triadic character means that the concept of expression cannot be referred either to causality within Being or to representation in Ideas, but goes beyond both, which are seen to be particular cases of expression. For with the dyad of cause and effect or that of idea and object, there is always associated a third term that transposes one dyad onto the other [...]. What is expressed is *sense*: deeper than the relation of causality, deeper than the relations of representation.

(Deleuze 1992: 333-5, 27 emphasis added)

This thesis analyses the potential of the philosophical concept of '*expression*' in accounting for *and* driving architectural design and research. It provides an architectural response to Gilles Deleuze's re-examination of one of the most significant springing points in the history of western thought. It is in his contemporary re-reading of Spinoza's Ethics (1996) where he first discovers this concept and through which he offers an alternative to traditional dualist epistemologies. He argues that this aspect of Spinoza's approach creates the potential to positively reframe a malign and crippling Platonism which had been carried through the Enlightenment within Cartesianism, and which it is

the task of contemporary philosophy to overcome (Deleuze 1994: Chapter 4). Deleuze explains that predominant – 'representational' – systems of thought privilege processes of identification on one or other side of an essentialist dualism – acting either as empiricism, 'referring to causality within Being' (emphasising functions) or as idealism, 'referring to representation in Ideas' (emphasising forms) (Deleuze 1992: 333-5). Deleuze claims that the principle of *expression* simultaneously addresses both of these essentialist tendencies in traditional epistemologies, making it more able to adequately account for the power or potential of creative acts.

For Deleuze, Spinoza's thought is like having a 'whirlwind at your back', carrying us through ideas 'like a witches' ride' (Malmoud 1967)<sup>1</sup> but paradoxically, it is a work which at first appears 'to have no style' (only following terse logical and geometrical rules). Spinoza 'moves and changes' the thinking of those who read and engage him by having 'three wings' not the usual two, offering the opportunity of carrying both 'philosophers and non-philosophers towards the same final point' where it becomes 'a bird on fire' (Deleuze 1995: 166). Almost irresistibly, this document is also carried along by the force of Spinoza's flaming, triadic whirlwind and consequently both the form and content of the document are informed by the triadic structure of expressionism. In posing the question 'How can Deleuzian expressionism be understood and experienced in architecture?' I have found my task to consist of an exploration of three interlocking aspects, each considered in relation to two formal products leading to the articulation of six key principles.

The three 'parts' of this document - each comprising a pairs of chapters - address in turn, the three *aspects*<sup>2</sup> of the expressionist ontology (and epistemology) as set out by Deleuze in relation to Spinoza in the leading quotation above. Expressionism considers how 'being' (and knowing) are created in terms of '*What expresses itself*'; '*The expression itself*' and '*What is*

*expressed*'. The three parts of the document consider the architecture of expressionism, the forms (and functions) of expressionism in architecture and finally the active practice of an expressionist architecture. A series of critical encounters between philosophy and architecture exploring the accounts and practices of Robin Evans, Rem Koolhaas, Peter Eisenman and both professional and pedagogic design-research undertaken by the author, articulate six key principles of a non-representational, expressionist methodology for design and research in architecture: First 'expressionism' insists on a substantive distinction between *nominal* and *real* denying any essentialist component to architectural products or production. Second, an encounter with Evans shows how architectural bodies both produce and are constituted by 'projective relations' *external* to architect, drawing and discipline. Third and fourth, Koolhaas and Eisenman's divergent positions are used to demonstrate how projective distinctions are always embodied in two actual forms which select *content* and *express* an exterior. Fifth, a design for a non-human 'client' makes explicit the parallel and serial nature of processes of selection and projection. Sixth, community-engaged design-research demonstrates that active speculation towards positive change (outside of self and social habit) is a mechanism for the serial production of simultaneously ethical *and* aesthetical affective relationships. Extending and sharing the production of capabilities and powers of expression beyond the architect and architecture demonstrates the overarching principle of expressionism - '*Ethical joy is a correlate of speculative affirmation*' (Deleuze 1988a: 29).

This document specifically focuses on examining the appropriateness and potential of the Deleuzian - expressionist - reading of Spinoza to assist with the production of an account of the knowledge gained and produced through processes of creation in architecture - an account which does not suffer an inherent inability to describe dynamic creative processes (which occur across time or in series) and which have both generative and

epistemological dimensions (at the same time or in parallel). In an expressionist approach, both experiences and representations are grounded in the deeper, a-priori relations of a body (a particular, actual, real body) in which they literally *make sense*. It is by recognition of the body as a third term situating the phenomenon, that the dyadic relations of traditional approaches are transformed. Deleuze's embodied, relational reading of Spinoza unifies ontological and epistemological commitments within the singular concept of expression. This is to say, what a body *knows* can be considered to be equivalent to what a body *does* and distinctions between mind and body or perception and imagination are made secondary to the relations of difference which produce them (Deleuze 1992: 218).

I will demonstrate that Spinoza's three wings of thought enable a strategic unification of accounts of forms and functions in architecture, but while this is the main technical focus of this document, it is important to note that the dual form / doubly articulate structure of this relational ontology is fully and deliberately implicated with respect to wider social discussions. For example, a triadic Spinozist approach can be seen operating in works written by Deleuze with Felix Guattari such as Anti-Oedipus: Capitalism and Schizophrenia (1984)<sup>3</sup> and this expressionist conception extends into Guattari's individual writings - for example in the triadic concept of 'ecosophy' (Guattari 1995). This latter concept has become an important point of interface regarding the consequences of relational ontological understandings for architectural practices and the issue of sustainability (for example). A recent comprehensive account of architectural engagements with the issues raised by a fully embodied conception of nature is given by Peg Rawes in Relational Architectural Ecologies (2013) where she describes the importance of a re-definition of architecture as an environmentally focussed set of questions 'about the value of the social and material formation of our 'built' environments *for all*' (Rawes 2013: 1).



The specific nature of the engagement with Deleuze's reading of Spinoza articulated here, places some of these broader (embodied / ecological) aspects of the political and psychological implications beyond the academic limits of this study. However, the design practices which have constituted a large part of its formation and which operate in open social contexts, cannot be so limited and retain their relevance. Consequently the design and research practices described here do explicitly address issues of psychology and economy - as far as required and desired within the context of those particular explorations. For example, the inclusivity of built environments is not the material subject of this thesis, and this connection to Deleuzian theory sketched in the previous paragraph is deliberately not expanded. However, the practices described in part three (chapter six) are directed towards the construction of 'inclusive urban design-research' - aiming to consider both the physical and social construction of place for people of all ages, attitudes and occupations, through enacting the principles of an expressionist design-research methodology. Whilst the architectural activities undertaken in parallel with the construction of this thesis document have in turns, been accounted for and driven by the theoretical articulation presented here, the thesis brings together the philosophy and the architecture in a more explicit way than many of the design practices described. The development of these (design-research) practices has come through alternative routes, rather than as an application of the design approaches of others. None of it has been undertaken specifically to develop a design-research methodology, to serve as a case-study for an already established method nor to test approaches of other theorists or similar practices, but has rather been independently driven by the social and political concerns outlined above, in an attempt not to instrumentalise Deleuze's work in a reductive way.

For example, it will be obvious to the reader that there are areas of direct overlap between some of the professional work described here and that of

prominent practitioners such as Petrescu who also articulates an explicit Deleuzian theoretical position in relation to her practice. Atelier d'architecture autogérée (aaa) (2013: 270) provide an account of a Deleuzian architectural practice which does not apply Deleuze to a standard set of formal practices to 'extend' the boundaries of formal production but rather shows ways in which the assumption of the boundaries of both form and content are questioned. For aaa, designing or producing space is seen as enabling the construction of embodied territories which therefore first require us to build a collectivity who might be able to de and re-territorialise space. This work clearly provides practical examples of the links between the ontological point about an inclusive city made by Rawes above and the actual architectural practices undertaken by myself and my students. However, rather than a conscious or unconscious working out of Petrescu's ideas, the understanding articulated here and the practices undertaken in this regard were developed through a more directly affective connection to the primary source of Deleuze via a personal relationship to Deleuzian theorist and practitioner Robin Durie who I met as an invited speaker to the PhD by architectural design programme at the beginning of my studies. Durie employs Deleuze to provide a theoretical basis for a complexity theory account of transformative community development (TCD) and his work is key to the relational ontological interpretation of Deleuze's account of Spinoza I make here. (See for example Wyatt and Durie 2007 and Durie 2002). Consequently, while the Manchester School of Architecture students in the 'projects' atelier were asked to make reference to the work of Petrescu as well as a range of minoritarian<sup>4</sup> practices across art, architecture and wider society, they do not form a large part of the construction or completion of this document.

## Expressionist architectures

There has been a wide appreciation of the importance and usefulness of Deleuzian philosophical approaches across a broad range of disciplines. In architecture, interpretations of Deleuze and the architectural products and processes to which he has been associated are both various and evolving. In chapter two I read Evans as positing an articulate and sophisticated Deleuzian account of architectural epistemology while acknowledging that he was not directly influenced by Deleuze prior to his untimely death (although there is evidence for his admiration for both Spinoza and Bergson). Evans' (1944-93) career ceased just as Deleuze was about to come to prominence in the UK. While a number of architectural theorists engaged with Deleuzian thinking as early as the 1980's, Deleuzian theory was initially brought to a wide Anglo-American architectural audience through the influence of Peter Eisenman<sup>5</sup> in the 1990s, with publication of an English translation of The Fold: Leibniz and The Baroque (1993) and his use of the concept of 'the fold' in his Rebstock Park project (Lynn 1993). Since this time Deleuze has become a theoretical source for a remarkably broad selection of architectural practices on both sides of the Atlantic - from what might now be considered mainstream (Eisenman and Koolhaas) to the politically minoritarian (e.g. Atelier d'architecture autogérée (aaa)).

A prominent recent appraisal of the interaction between the work of Deleuze and architectural theory and practice is provided in terms of both a broad chronology and many more specific analyses in Deleuze and Architecture (2013). Frichot and Loo include contributions which indicate an early radical phase (circa 1980's - 1990), a populist phase (circa 1990-1999) and a varied revival since. Describing these three phases as before and after 'the fold', Burns explains that the early phase included a range of voices such as Jennifer Bloomer who had a keen interest in the minoritarian, political commitment of a Deleuzian philosophical approach but who were, at least

partially, drowned out by the 1990's popularisation by Lynn and Eisenman and that this led to the erasure of the 'sexual difference component of architectural Deleuzian work' (Burns 2013: 16). On the other hand both established and emerging male voices making early use of Deleuze but more focused on mainstream practice (such as Tafuri and Koolhaas) have remained prominent protagonists in a continuing discourse which has since evolved into a third phase. The populist incarnation of the relationship between Deleuze and architecture has received most critical attention partly due to the voluminous nature of the material involved but also due to its convenient - relative - lack of challenge to existing epistemological positions. It is now more often used to describe a period where Deleuze became 'misinterpreted and misunderstood' (Jobst 2013: 72) or in terms of the more specific error of 'focussing too closely on the formal aspects of architecture' (Parr 2013: 197).

Amidst a promiscuous, prominent and nepotistic<sup>6</sup> broadcasting of this more mainstream, formally focussed, utilisation of Deleuzian theoretical concepts, Burns traces the continuing influence of voices such as Bloomer or Claire Robinson who are more interested in the political potential of Deleuze in relation to the production of form and who distinguish for example, between 'the form of the fold and an interest in folding' (Burns 2013: 30). While I also identify 'the fold' as a key concept introduced into the architectural lexicon from a reading of Deleuze, leading to key computational and linguistic theoretical trajectories for architecture through Lynn and Eisenman respectively, I exclude the text The Fold: Leibniz and the Baroque from my study since this work originates as a chapter in Spinoza: Expressionism in philosophy, where Deleuze's critical analysis of Leibniz is used as an additional example of an attempt to produce an immanent philosophical account through the concept of *expressionism*.<sup>7</sup> However, Eisenman continues to argue that 'the fold' is one of many 'diagrams' that enable him to generate forms (Eisenman 1999). I discuss the purpose of his

wilful misinterpretation of Deleuze in detail in chapter four with respect to his highly contested attempt to establish an alternative epistemology for architecture (whose ostensible purpose is to avoid the pitfalls of traditional dualist epistemologies).

Today, in the 'post-fold' phase, the vocalisation of engagement with 'the transformative consequences' of Deleuze's work (Parr 2013: 197) remains (and may even be becoming more prominent) through inclusion alongside more mainstream discussions regarding the nature and value of 'critical' architecture as well as architectural knowledge in relation to academic research in architecture. However, the simultaneity of divergent views which have evolved in these major and minor parallel histories can result in a debilitating complexity and profundity of articulations. Consequently, there are also a range of attempts to characterise the different uses of Deleuze in architecture - for example - as falling into three camps - *erudite*, *productive* or *cosmetic* (Bernard Cache and Christian Girard 2012: 97). In this case those considered 'erudite' address his influence with respect to existing theoretical frameworks both within and outside of architecture (e.g. Grosz 2001). Those considered 'productive' arrive persuaded of his importance and attempt to implement these new understandings in the discipline (e.g. DeLanda 2000). Clearly, the group given the unfriendly sobriquet 'cosmetic' are the most likely to dispute membership and the manner in which his work has been interpreted in any of these categories has produced great divergences even with respect to single authors. For example, the contentiousness of the use of Deleuze today can be illustrated by the fact that his work is cited by *both* poles of debates concerning critical architecture held at the centre of mainstream practice (e.g. Koolhaas and Eisenman see Rendell 2007) and simultaneously as a foundational source for minoritarian presentations of the role of the architect (as well as holding a considerable overlap with challenges regarding the value of non-physical activities in designresearch) (e.g. Petrescu et al 2013 : 262).

## Critical projects for architecture

Moving from these more broad categorisations to directly questioning the application or interpretation of Deleuze in architecture in the specific terms of 'what it does' for those employing him, results in assessments such as that by Vidler of Eisenman, for who Deleuze serves merely to 'invent a pedigree and gain legitimacy for his morphological experiments' (Vidler 2000: 5). Similarly, Murray Fraser's assessment of Koolhaas sees him as constructing a critical narrative for practices which remain necessarily embedded in traditional capitalistic production processes - 'a fifth columnist' (Rendell 2007: 333). I will investigate the role of Deleuzian theory in both Koolhaas and Eisenman's accounts of their practices in chapters three and four and the extent to which they can claim to be pursuing a non-representational, Critical project for architecture. However, I argue the reason why Deleuze is able to provide these prominent disciplinary figures with legitimacy might usefully be considered as broadly the same as for the more minor voices who cite him.

Deleuze calls Spinoza the 'prince of philosophers'<sup>8</sup> because he finds in Spinoza's work the first coherent and comprehensive version of a concept of expressionism which enables considerations of identity 'forbidden' or repressed since Plato (Deleuze 1992: 322). In part, Deleuze's choice of Spinoza enables him to make these repressions explicit by positing the pedigree and persistence of an alternative, 'minor' history of philosophy, since along with Leibniz<sup>9</sup> he offers a contemporaneous point of divergence from the dominance of Cartesianism. However, Spinoza is also the starting point for Deleuze's own contribution to what he sees as the 'task of philosophy itself', defined as the need to 'overthrow Platonism' by 'abolishing the world of essences *and* the world of appearances' (Deleuze 2003: 253). This minoritarian history of philosophy which struggles to avoid repression by dominant representational dogma while raising the spectre of

a prioritisation of difference over relations of identity, is at once the source of the narrative which enables 'avant-garde' mainstream practices such as Koolhaas and Eisenman to claim critical legitimacy and genuinely minoritarian practices such as Petrescu's seek its explicative powers of rationalisation. In so far as there is an overlapping consensus<sup>10</sup> in these divergent accounts it is with respect to a broader historical necessity for the transformation of ways of thinking about creative processes.

In the context of Deleuze's work coming to the aid of architecture to avoid the reductive pitfalls of representational thinking, the various contributions to the discourse described above can be seen as a positive 'post-structuralist' part of a history of attempts to 'overthrow Platonism' and produce a non-representational or non-essentialist account of thinking and doing in architecture (e.g. as Heynen describes the 'post-critical' view of Somol and Whiting to whom she is implacably opposed (2007: 50)). This thesis consequently views the contributions of Evans, Koolhaas and Eisenman as part of an expressionist analysis of how these wide ranging enthusiasms for philosophical thinking have been made manifest in architecture and each instructive of how a more adequate account may be constructed. From this perspective I characterise the expansive literature briefly set out above as considering the import of Deleuze in three broad theoretical trajectories. First, Deleuze is used to support or challenge traditional dualist approaches from an empirical perspective (e.g. performance and computation); Second, used to support or challenge accounts or practices derived from or embedded in an idealist perspective (e.g. with respect to formal production and inspiration) and thirdly, to develop strategic non-representational – relational – approaches (e.g. in practices emphasising difference over identity). The six principles explicated by this document are intended to enable a clear distinction between the third approach and the first two, but in acknowledgement that it is in the nature of these distinctions that they

are to be 'continually tracked down and brought into the light' (Deleuze 2003: 253).

Entering the territory of a discussion of research in architecture is a natural consequence of exploring an embodied epistemological account of architectural knowledge. In a prominent paper written for the UK professional architectural establishment (the RIBA) intended to 'represent its current thinking and to provoke further discussion' Jeremy Till has characterised the current situation in architectural research as invested in the employment of two<sup>11</sup> myths (Till 2010). In the first case, architecture is understood as a unique form of knowledge which should have its own evaluation criteria, separate from the sciences or the humanities, with the production of a building seen simply as research in its own right. In the second position architecture is understood as an interdisciplinary practice which necessarily requires many other sources to produce and legitimate its work. On the one hand, essentialist formalism tends to reinforce disciplinary closed-ness, focussing on a notion of autonomy which Till suggests lacks rigour and has become a self-defeating marginalisation because its production cannot be tested or shared outside of the discipline (Till 2010). On the other hand, empirical determinism can be seen to stretch architecture too far and break it into reductive elements of scientific research through the use of methodologies and paradigms which do not suit its particularity and breadth. In making this dualist characterisation of existing approaches Till supports an alternative which both recognises the specific nature of architectural practices but which remains open to continual redefinition through engagement with practices outside its usual boundaries.

Whereas Till is working to bridge the professional and academic research domains, most discourse about the status of design knowledge as research takes place in the academic forum in relation to institutional valuation



exercises which produce their own definitions and mechanisms for assessment. These definitions include for example, 'a process of investigation leading to new insights effectively shared' (the UK Research Excellence Framework quoted in Fraser 2012: 1) but the description offered by Fraser in Design Research and Architecture (2012)<sup>12</sup> better serves to demonstrate (through an attempt at inclusivity) just how diverse are the activities under consideration. In his introduction he defines design research as 'the processes and outcomes of inquiries and investigations in which architects use the creation of projects, or broader contributions towards design thinking, as the central constituent in a process which also uses more generalised research activities of thinking, writing, testing, debating, disseminating , performing, validating and so on' (2).

In an embodied epistemological conception, the variety of species of design research would be expected to be as diverse as the activities which it is possible for a designer to actually do or embody. However, while it appears to be a matter of consensus that every act of design, to a greater or lesser extent, produces *knowledge*, the construction of *a value for* this design knowledge is an almost entirely independent activity requiring a different set of products and relations. Consequently, from an expressionist perspective the key feature of the REF definition is not with respect to the gaining of this knowledge ('new insights') or having them 'effectively shared' - but how each informs the other is made explicit.

The collection demonstrates the broadness of its church by describing a wide range of practices and Fraser presents the 'openness' of this collection as its key strength because it clearly produces 'a new paradigm of research' (Fraser 2012: 3). The example most applicable to this study is that of one of the instigators of the volume Teddy Cruz, who is also a paradigm of the -third - alternative non-representational position espoused by Till. He describes work which uses all intellectual and practical means available to the architect

as a design professional and as a citizen to move from the notion of a 'Critical distance' and instead posit a 'radical proximity' (205). Cruz attempts to understand and transform environmental contexts seen as fully physical and social across a range of scales from nation to street via the city.

By way of extreme contrast, another example articulates a position which is determinedly restrictive about the boundaries of the discipline, describing practices undertaken by Leon van Schaik which consider the creation of a forum of architects discussing the design processes of actual built work as a type of design research - because it brings 'to the surface evidence about what designers actually do' (54). Van Schaik makes the context in which knowledge necessary to the activity of design is brought to the surface similarly explicit as he also describes how that research was designed to enable a group of Melbourne architects to rise to much greater prominence within the discipline of architecture. This approach certainly managed to contribute to an increase in the prominence of some of those local - highly formalised - practices, exporting them around the world.<sup>13</sup> Here there are two clear ambitions, firstly make knowledge considered currently undervalued into a commodity and then be able to trade on the reputation that creates. Here, the convenience of the interpretation of what might be considered an 'insight' and how the interiority of the judgement of the 'effectiveness of sharing', makes van Schaik's project and this vein of design research highly controversial.

The preface to Fraser's design research volume observes that the collection began by seeking to address the problem that 'PhDs by design had little, if any, chance of ever being able to publish their work as a substantive and coherent entity' as well as to address the problem that 'a growing number of architects [...] were producing excellent design research work which was not being disseminated adequately' (Fraser 2012: Acknowledgements). This understanding of the necessity for the production of quality research as well

as a mechanism for its valuation demonstrates how *both* forms of content and forms of expression are produced in relation to the outside of the architect and the discipline. Not only must architecture consider how it is able to produce academically rigorous forms of content, it must also do so in such a way as to construct a system by which they may be valued. However, without making further distinctions *both* Cruz and van Schaik coexist under Fraser's *design research* umbrella. In this account it is clear that the form of content of the research and its form of expression remain liable to be conflated within the dominant representational paradigm into one of the two myths proposed by Till. While 'design research' is partly about placing design in relation to bodies outside of the discipline to create exchanges which might augment that knowledge or enable the production of a valuation of that knowledge, it is not articulate enough a concept to direct the production of the socially engaged architecture desired by Fraser when critiquing Koolhaas for example.

An expressionist framework goes further, making clear that the discussion of what makes knowledge rigorous cannot be held in terms of just what is thought and seen or in terms of only what is said and done, but must include *both and* the interaction between them. It is in this manner that it may be possible to avoid the representational reduction and its simultaneous repression of the differences or problematics which constitute the potential of these arrangements of knowing and being in the first place. Insisting that content and its expression are articulated as two relatively independent activities avoids the reduction of *the act of sharing* to *the production of an insight* (or vice versa) and leads on to an insistence of a discussion of the power which enables both.

I therefore use the term design-research in this document to indicate circumstances where design *and* research are not seen as dual activities which are then brought together with one quietly placed inside the other,

but rather an embodied and projective (explicit) set of activities whose parallel, double articulation is otherwise repressed. This expressionist perspective argues that critical (design) practices which produce what might be valued as 'research' are defined by the six principles set out in this document - because - a projective approach creates knowledge in and through this relationship to the outside - to mutual benefit. The understanding of the processes of production of expanded socially relevant disciplinary knowledge has to be explored in relation to a critique of the embodied *project* rather than merely in terms of the creation of an infrastructural mechanism to enable architects to undertake creative production in new markets. In this regard, rather than seeing 'design research' as a key site for socially responsible architecture 'the city' and *all* its citizens have become the focus of what MSA projects describe as 'inclusive urban design-research', chiming strongly with the redefinition called for by Rawes mentioned above (and which forms the content of chapter six).

### The three parts

Part one 'the architecture of expressionism' is thus focused on articulating a Deleuzian ontological (and epistemological) position from what I might then describe as 'first principles'<sup>14</sup> in an architectural context. It literally and theoretically draws a diagram of the triad of expression which directly informs the form and content of the document and the setting out of six principles (For example see Figures 1 and 2 below). Chapter one undertakes a close reading of Spinoza: Expressionism in Philosophy (1992). It explains how an expressionist system of thought holds the differential relations between objects and subjects to be *real* – productive and constitutive distinctions of both being and knowing. It articulates how an insistence on a substantive distinction between the nominal and the real produces a re-prioritisation of difference over identity in the construction of thought and knowledge. It describes how this becomes a decisive political commitment

through absolutely (continually and particularly) denying any essentialist component to architectural products or production. It demonstrates the basis of principle one, which proposes the architectural *project* as the third – repressed – term of the triad of aspects of the expressive production of architecture. In chapter two<sup>15</sup> an encounter with Robin Evans explores how the relational nature of a triadic, two-form notion of *project* more adequately accounts for the creative potential of the discipline and the individual creative acts of the architect. It shows how creative potential is constructed entirely through relations external<sup>16</sup> to both the individual and the discipline, in contrast to the assumption of an *inherent* cause or representation in dualist accounts. It demonstrates principle two 'embodying projection', which claims that projective relations must be made *explicit* if representational inadequacies are to be avoided and the creative capabilities of the discipline valued and negotiated.

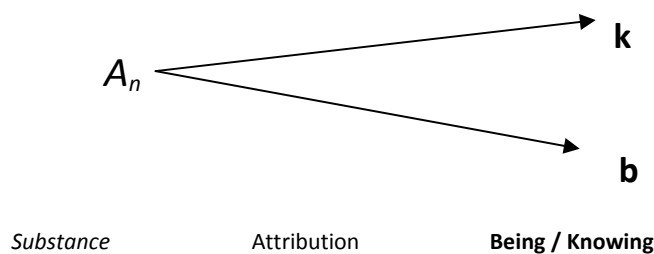


Figure 1\_  
Diagram of an embodied epistemology / relational ontology (in parallel)

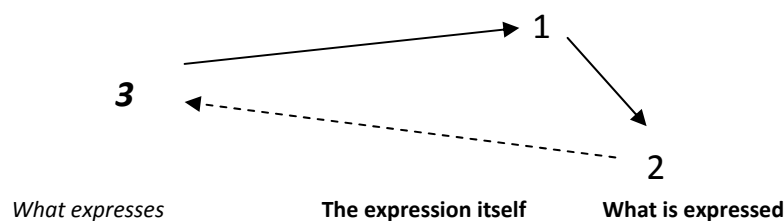


Figure 2\_  
Diagram of a two-form, *triad* (in series)

Part two 'the two forms of non-representational practice' consists of an exploration of divergent accounts of the production of form and provision of function in encounters with Rem Koolhaas and Peter Eisenman. It examines both the operation of dualist, representational epistemological mechanisms in the accounts of their projects and the potential of a triadic, non-representational alternative to explicate and drive their creative productions. Chapter three considers the repressive role of the dualist, representational regime in the valuing of architectural knowledge in both the speculative and commercial practices of Koolhaas. Chapter four considers the limiting role of representational thought processes in the theoretical articulation of the practices of formal construction of Eisenman. The third principle 'doubly articulate' indicates that the multitudinous (projective) distinctions which both constitute and produce any architectural body always articulate two embodied, actual forms - those selected as *content* and those projected to *express* an 'exterior'. Each one serves to exemplify aspects of the production of these dual formal manifestations in the context of epistemological accounts which draw inspiration from Deleuze, conflict with the evidence of their own practices and act as one of the opposing poles of the critical architecture debate.

Deleuze claims that when 'representational' thought privileges relationships of identity over relationships of difference it also results in a privilege of *timings*, either a-priori or a-posteriori, synchronic/diachronic etc. Avoiding this simplistic conception of time as a 'repetition of the same' requires an account that insists on a continual reciprocity between actual forms and virtual dimensions. (For example<sup>17</sup> see Deleuze 1994: 104 and 303). The fourth principle 'forming relations' captures the importance of understanding any creative, dynamic process of composition and re-composition as an ongoing engagement with external relations of difference. This principle consequentially demotes identity relations to a status secondary to the differentials which constitute them and relations of identity

are only subsequently considered as comprised of dual, parallel forms. Part two demonstrates that a key distinguishing feature between non-representational and representational architectural practice centres on how the characterising distinctions of those disciplinary practices are made primary or secondary with respect to wider society or whether they can be understood as productive differentials which exist both in parallel and in series. This part demonstrates that the dominant epistemological diagram of power insists on representational exchanges of architectural knowledge despite a range of attempts to resist these reductions. It argues that these reductive practices, which both architects claim to resist through irony or dissimulation, are not the result of political facts external to the discipline but a constitutive part of its epistemological construction. It finds that the restrictive effects of 'professionalisation' are not generated through a devaluing of the drawing or the affective labour of the architect *within* the representational paradigm – but by our necessary (however partial) compliance with the representational paradigm itself.

Part three, 'an expressionist architecture' describes practices undertaken to test the potential and appropriateness of an expressionist - 'projective' - approach for accounting and driving architectural production with simultaneous aesthetical and ethical characteristics. Chapter five, in a collaborative design project undertaken by the author, explores how a design for a non-human 'client' makes explicit the parallel and serial reciprocally determining processes of selection and projection in any design process. This encounter provides circumstances where neither form nor function can be readily reduced to typologies or essences and both have instead to be seen as different 'species of affect', with their nature determined by the bodies with which they are in relation. This example is used to demonstrate the fifth principle of a Deleuzian design-research methodology, which claims that architectural bodies must be continually composed in series for the production of creative differences to literally

make *sense*. The final chapter presents a sixth principle, which argues that the process of projection and selection of compositions through action create and recreate the circumstances for increases in the capabilities of the composing bodies. Understanding intuitive enactment as productive of an embodied increase of potential in both the producer and the audience of design is demonstrated through a recapitulation of the principles exemplified in the previous five chapters, in the context of interdisciplinary and extra-disciplinary collaborative architectural undertakings intending to avoid complicity with representational models of architectural labour. The final chapter serves to articulate specific architectural practices which pursue the conjunction of mechanisms of ethical decision and aesthetic determination in the process of expression.

### A diagram of the thesis structure

Deleuze's reading of Spinoza abstracts the triad of terms 'Substance', 'Attributes' and 'Modes' in terms of a singular concept of 'expression' which attempts to account for the embodied and relational nature of time and being. Consequently, I have had to establish terminological linkages from Spinoza's triad of terms (which deliberately built on the Cartesian convention of the time) into more familiar and contemporary linguistic terminologies enabling connection to subsequent architectural theoretical references. The terms **form of content (of expression)** and **form of expression** are subsequently used throughout to indicate the **two actual forms** of Being and Knowing in the *triad of expression*. The selection of these terms, which are taken with reference to Foucault (1988) and to A Thousand Plateaus (1992), is intended to enable an emphasis on **forms** (rather than expressions, bodies or affects) in order to subsequently highlight the differences between the traditional dualism of forms or functions in architecture and the parallelist (two-form) alternative of **forms of content** and **forms of expression** of Deleuze. The third, virtual, *informal* aspect of the triad is described as 'having



the sense of a diagram' in Deleuze's work on Spinoza. However, Deleuze's text Foucault has been the most common reference for the theoretical discourse of diagrams in architecture with respect to both Peter Eisenman and Rem Koolhaas as well as to other key architectural protagonists discussed in this document<sup>18</sup> and I therefore correlate these discussions below to enable a precise discernment of the use of these terminologies in architecture.

While Deleuze's use of the term diagram originates in his work on Spinoza, it is chronologically coincident with a broader exposition of its meaning in Foucault and Michel Foucault's own use of the term in his work Discipline and Punish (1977). My reading of the term *diagram* in the monograph Foucault emphasises an expressionist interpretation of Michel Foucault's discussion of 'the Panopticon'. According to Deleuze the concept of *the diagram* is articulated by Foucault as a mechanism for the production of subjectivity. In Foucault's primary example (taken from Jeremy Bentham's architectural work) 'the Panopticon' *diagram* is used to enact a disciplinary model that is *affectively* the same for 'the children in schools', 'the soldiers in army barracks' and 'the inmates in prisons' (Deleuze 1988: 34-39) each of which should be considered in terms of two actual forms of existence; how it is affected (**formed content** – the schooled children) and how it is affective (**formed expression** – the school). Deleuze describes the process of interaction between the exterior and interior of a body, which constitutes / produces its subjectivity (leading to these **two-forms** of its expression) as 'folding'. In this expressionist account, the two parallel forms of the object or body are **both expressive of** a particular, causal set of external relations or forces which act to discern that particular expression in that particular expressive manner – produced through the continual, serial interactions or 'foldings' between its 'selected interior' and 'projected exterior' (for a reference to these concepts in his reading of Spinoza see Deleuze 1988a: 125 and in his reading of Foucault; Deleuze 1988: 96).

For Deleuze, Foucault's 'Panopticon' serves to show how an abstract, strategic or *virtual* process of distinction may be articulated across a variety of **actual forms** of matter to produce similar affects in different subjects. Here the term *diagram* is used to describe the *informal*, embodied relationship that exists between the strategic knowledge held in this formless (indeterminate yet determinable) relationship between subject and the world (through the enacting of panoptical relationships) and the actual physical, concrete manifestation ('schooled children' as a **form of content**) of its abstract power (to educate or 'school' as a **form of expression**). Here the 'folding' (relational, reciprocally determining) processes described by Deleuze are defined as producing '**concrete machines**' through the direction of '*abstract mechanisms*' that both Foucault and Deleuze refer to as '*diagrams*' (Deleuze 1988: 34). The key point here is that both 'the fold' and 'the diagram' are concepts implicated within a Deleuzian project to explicate a Spinozist 'embodied' epistemology / 'relational' ontology in order to enable the simultaneous articulation of processes of generation and constructions of knowing, thereby avoiding the traditional reduction to either one or the other.

Relating the format of this document to the theoretical and literal structure of the triad by way of an example, each of the three pairs of chapters might be referred to as a 'diagram' because each part consists of two separate actual forms relating to the same informal dimension - and this is what the term 'diagram' is employed to capture. In the first 'diagram' both chapters one and two are 'essentially' expressions of a problematic inadequacy in traditional dualist epistemologies and the philosophical form expressed in chapter one acts as the content for the architectural form of expression of chapter two (although they 'bear no resemblance' with each other). However, with a combined ontological and epistemological commitment, the three diagrams or parts may also be understood to address the production of three kinds of knowledge. In this context, the three parts of

the document can be considered as a progressive series, beginning with a theoretical understanding of expressionism, moving to a rational analysis of the role of expressionism in particular situations and thirdly through the active construction of new, expressive situations. I explain the three kinds of knowledge implied in an 'embodied epistemological' account in chapter one, the key point of which is that while building on an initial reactive knowledge to create a more rational and sensible understanding of cause describes the construction of reason - for Deleuze - a further, higher state of knowledge exists which is a more active knowledge of productive intuition. This is of importance because a Deleuzian account provides a precise definition which both supplants and explains the malign inadequacy of disparaging accusations of capriciousness to which design 'intuition' is traditionally made subject. The identification of a form of intuitive knowledge central to creative and ethical practices which is reduced or obviated from traditional epistemologies is clearly central to the discussion of the value of architectural knowledge in society in general and architectural research in particular. Each of the first five chapters therefore are also structured to show a progression over three parts beginning with discussions regarding the nature of representational practices and moving towards how to enable more intuitive ones. Chapter one sets out the parameters of this diagram which serves as an informal principle for the document.

## The chapters

Chapter two undertakes a Deleuzian critique of dualist – 'representational' – practices in the discipline of architecture in detail with respect to the work of Robin Evans on 'picture theory'. It notes the prevalence and predominance of dualist epistemological tendencies in accounts of contemporary practice and identifies the 'professionalization of the discipline' as a broadly held mechanism of repression of the creative potential of architectural practices. The encounter with Evans demonstrates that the denigration of the actual

creative potentials in design processes traditionally occurs through either a *limiting* application of rational determination or through consideration as *excessively* solipsistically productive, dependant on which side of the dualism the account is based. It draws explicit correlations between his critical account of traditional architectural epistemologies and Deleuze's philosophical critique in Difference and Repetition (1994). The chapter examines Evans' argument that creative architectural processes are better understood by placing simultaneous importance on the - 'projective' - relation **between the architect and their drawing and their drawings and the built products**, as well as the *inter-relationship between them over time*. The third kind of knowledge in Deleuze's account is 'gained' through actions which, while guided by reason, are 'projective' in the sense that they provide a map or diagram of the desired affect but they do not pretend to inhere the power to actually produce those particular outcomes in real bodies.

I argue that Evans' *projective* response to the reductive translation processes of 'picture theory' produces an expressionist alternative to representational practices in architecture. Evans's account of architectural production creates an embodied triadic structure by reiterating the importance of a normally repressed third term which he describes in terms of 'projection' and which I explore in terms of the triad of *project* - process - product as a way to both ground the excesses and transcend the limits of traditional design epistemologies. I choose this term rather than diagram because it forms part of a triad familiar to the discipline and while it can be used in relation to architectural drawings, it has holistic connotations which are nonetheless directed or specific and appears less easily reduced to a single drawn instance in the way the term diagram can.<sup>19</sup> In addition the term project has a link to the 'Critical architectural' discourse which gives it the potential for re-engaging with a political discussion of the embodied potential of the architect and addressing the social and disciplinary crisis of value of architectural knowledge which this discourse describes.

The second chapter briefly contextualises the critical theoretical position of Robin Evans in the context of this contemporary architectural discourse concerned with the ethical qualities of formal practices and identifies a correlative use of the term 'project'. It establishes the authority and contemporary relevance of Evans' critique as well as delineating the parameters for engagement with the practices of Rem Koolhaas and Peter Eisenman in subsequent chapters. By placing the Critical architecture discussion in terms of an overarching project to question both determinism and essentialism, it can be seen that it is precisely the value of design knowledge that is at stake. Identifying the 'transmundane'<sup>20</sup> vacillation in the critical discourse between Koolhaas and Eisenman (for example) as a reiteration of traditional dualist reductions of design to either its products *or* its processes, and pursuing an alternative trajectory addressing both the nature and value of architectural knowledge, the thesis proposes the architectural *project* as an 'embodied' epistemological *and* ontological third term of an expressionist - Critical - account of architectural design and research.

Chapter three explores the relationship between a design infringement case and a faux patent application, both related to the design and construction of the Rotterdam Kunsthall (OMA 1992). It investigates how representational epistemological understandings of architectural knowledge operate as a mechanism of professional or disciplinary compliance, through an examination of the actual, pragmatic social value that it is possible for a powerful and prominent figure such as Koolhaas to place on the architectural knowledge produced. It does this both with respect to his visual/physical production (the Kunsthall) and the discursive articulation of it (the court case and the patent application), and examines both from the perspective of the architect as 'affective' labourer and architectural practice as exploiter of 'affective' labour (where affective labour is understood as the work done by the architect in the embodied production of projective

relations rather than the manufacturing of products and services).<sup>21</sup> It demonstrates how the oppositional categories of form **or** function are produced through the representational episteme and how this relates to the affective production of **forms of content** and **forms of expression** of the architects contesting ownership of the Kunsthall 'design'. Chapter three demonstrates how the oppositional positions of traditional dualist epistemologies categorise design knowledge as either transcendent essences or empirically derived sensible appearances.

Chapter four limits its engagement with the writings of Eisenman to a few key texts stretching across his career, beginning with an extract<sup>22</sup> from his 1963 PhD, The formal basis of modern architecture (2006a) and select contemporary writings including Diagram Diaries (1999). However, as one might expect, a theoretical engagement with Eisenman compels consultation with a number of secondary sources in order to establish correlation between his linguistic analysis of formal architectural practices and a Deleuzian position. Of particular note in this regard is the necessity of examination of a reference to 'the simulacra' taken from Logic of Sense (2003), in order to refute specific challenges made in relation to Deleuzian epistemology by establishing a critical understanding of the philosophical differences between Eisenman and Deleuze through the intermediary of Jacques Derrida. The relationship between Derrida and architecture is beyond the scope of this work and this necessary digression is kept as brief as possible through employment of the philosopher Leonard Lawler as an authority on the relationship between Deleuze and Derrida, specifically with reference to Thinking through French Philosophy (2003).

Whilst the chapter does commence a philosophical critique of Eisenman's theoretical and political position, rather than being an exhaustive attempt to explicate the linguistic and theoretical promiscuity of Eisenman's account of architectural practice, it focuses on the potential of a Deleuzian account to

augment Eisenman's attempts to pursue a non-representational epistemology for architecture. There is a long and complex history of attempts to construct formalisms in a range of disciplines, especially literature and mathematics, and a definitive cross-disciplinary account remains unwritten. Consequently, the relationship between understanding the use of formalist approaches by Eisenman who himself examines a complex set of multidisciplinary sources is not easily made through a limited number of references. Deleuze, (with Felix Guattari) provides a historical commentary on the development of formal science across several chapters of A Thousand Plateaus (1992) but I refer to a history of the philosophy of science by Isabelle Stengers in Cosmopolitics I (2010) to provide sufficient grounding of these issues without introducing additional terminologies and concepts. However, to avoid a lengthy digression in the chapter I shall briefly outline some key aspects of this investigation here.

Accounts of Deleuze's use of mathematics in his philosophy argue he attempts to construct a new kind of 'problematic' formalism (Smith 2006: 145-168). Deleuze argues that prioritising differential relations over categories of identity is a methodical, scientific process of revealing 'the problem in its true nature' rather than 'presupposing solutions' (Deleuze 1992: 168). A key feature of his 'problematic' approach as opposed to 'axiomatic' ones, is that the formal object is produced in relation to the formal subject, and the power that forms the object is not contained within (presupposed by) its form as either an intelligible essence or its function as a sensible appearance - but - is instead understood as produced entirely by the (explicit) affects of its relations with its outside. This requirement of making explicit the differential relations between subjects and object is a key theme of chapter two with respect to Robin Evans' exposition of an alternative architectural epistemology.

With respect to linguistic formalisms I refer back to Evans analysis that Eisenman does not think that architecture is 'like language', but like 'the study of language' (Evans 1997: 126) to provide impetus for a new reading which actualises a latent thread in Eisenman's work by tracing his complex discursive expressions back to early sources in Russian literary formalism. For this exercise I refer to Deleuze's own work on structuralism (How do we recognise Structuralism? Deleuze 1995: 170) as well as a primary source essay of the Russian literary formalist group (The Theory of the Formal Method Eichenbaum 1926) to highlight connections to debates in linguistics and the origin of these discussions in the Russian literary formalists. To further establish the ground for this discussion and Eisenman's extensive engagement with other linguistic theoreticians, I employ a further commentary on Deleuze (Leclercle 2002) which makes explicit his theory of language (considered only partially articulated in works such as Logic of sense or certain later works with Felix Guattari such as A Thousand Plateau).<sup>23</sup> Alongside this I consult a history of structuralism in linguistics (Matthews 2001) and a contemporary appraisal of structuralism (Thibault 1997). I also reference a key work on semiology to acknowledge specific issues regarding the use of structuralism outside of language sign systems (Barthes 1964).

This chapter argues that Eisenman creates an 'immanent' understanding of architectural form production in terms of the relationship between the architect and the drawing since **forms of expression** are prioritised by him as real distinctions of affect – projective, differential relationships – rather than nominative, descriptive or literal distinctions – e.g. 'false origins', 'zeitgeists', 'function'. However, the prioritization of the production of the distinction of architectural practice through an internal identification before acknowledging the externality of the differential relations which construct those disciplinary practices, means that he consequently reproduces a **form of content** as a purely intellectual, nominative distinction that conveniently removes all political, social purpose and power inside itself. The chapter



argues that forms of expression and forms of content must be advanced simultaneously if representational paradigms are truly to be displaced, unmotivated or dissimulated.

In chapter five I demonstrate how a non-representational account of design knowledge articulates the value of design knowledge in terms of embodied relations external to the process of its production. Analysing 'the Bat House Project', a RIBA competition instigated by the Turner prize-winning artist Jeremy Deller and entered by the author as part of an interdisciplinary team (winning second place in the professional category), I explore the role of external relations in developing architectural forms within a specific formal design process whilst examining the value of accounting for these processes using a Deleuzian design-research methodology (BHP 2007). In presenting a case-study of a design for a non-human species I demonstrate how an 'embodied project' and the principle of actively and explicitly producing affective encounters external to the discipline augments creativity in design processes.

The Bat House Project is used to illustrate these diagrams of affect because it provides a particularly apposite and concrete context. My direct participation enables the explication of personal and inter-personal reflections on the design process, which are necessary in the appreciation of subjective affective moments. As an official RIBA competition it operated within a formal disciplinary structure and this enables some of the conclusions to be plausibly generalised: the statements of the judging panel may be seen as statements made on behalf of the profession, the approach to judgement reasonably assumed to be repeated in other RIBA competitions and the more general views of some of the participants are on record for comparison purposes. However, whilst these pragmatic factors enable the discussion to be contextualised, the key reasons for the choice of the Bat House Project are its unusual instigation and subject matter. The

project and the analysis demonstrates that the critical and creative value of such engagements is made in relation to the real potential for external encounters to affect *both* the architectural subject and object. It explains how expressionist design knowledge must be a living, adaptive or transformative engagement for it to make sense to the users as well as the architect.

The final chapter describes aspects of the design-research practices of the staff and students of the Manchester School of Architecture Projects group that has overlapped much of the period of the production of this document. It acts to both summarise and open-out the themes of the five preceding chapters. The last chapter frames 'conclusions' to the discursive expression of the document in terms of the architectural capacities which have been exercised in parallel with its development. It clarifies the key principles of a Deleuzian design-research methodology by articulating a variety of attempts to respond to or apply these principles in both professional and student-led design-research and the pedagogic contexts in which they were developed.

First, '*the architectural project*' argues that non-representational architectural practices prioritise real distinctions of affect over intellectual representations. Second, '*embodying projection*' claims real distinctions are made through creative, transformative acts. Third, '*doubly articulate*' holds that creative practices are embodied in two parallel formal products. Four, '*forming relations*' maintains that two-form productions are compositions of engagements between bodies, both extrovert and introvert to the architectural discipline. Five, '*making differences*' finds that compositional arrangements are most productive if they endure in the substance of the expressions of those composing bodies as an active, intuitive sense. In each case these principles are discussed firstly in order to conclude the terms by which they have been demonstrated in the previous chapters; second in order to describe how they have been applied to and are expressed through

the pedagogic practices of the MSA projects atelier and third, to indicate how they currently operate as a diagram for the inclusive urban design-research projects undertaken by its staff and students.

While chapters one to five enable a relatively discrete description and development of these five key principles of an expressionist design-research methodology, they are made articulate only in terms of how affectively they produce concrete relationships external to the habitual - representational - architectural body. In the final chapter, the explication of these principles demonstrates the nature of an - overarching - sixth which this PhD by design both tests and is driven by. Principle six, '*critical diagrams, ethical joys*' argues that the serial production of affective relationships is a simultaneously ethical *and* aesthetical pursuit when it extends and shares the production of capabilities and powers of expression *beyond* the architect *and* their architectures.

This sixth principle that active speculation towards positive change is a mechanism for the creation of ethical joy through the augmentation of social capacity, both within the discipline and society, is the key intellectual and emotional driver for both the account made within this document and the design practices undertaken in parallel. Whilst the document describes some key behaviours for the development of embodied actions which aim to expand beyond the interior territories of the discipline of architecture, they are, by definition, an attempt to expand beyond even the most adroitly synthetic recording of their dynamism. An architecture of intuitive embodiment cannot provide a representation of ethical architectural practice, but must rather be an agent constantly in the middle of the production of both its subjects and its objects. Chapter six ends the document by opening itself out just where it begins - in Spinoza's 'middle' - ready once more to affect and be affected by new concrete contexts of expression.

**Part 1:**  
***The architecture of  
expressionism***

# 1\_The expressionist diagram

Everyone knows the first principle of Spinoza: one substance for all the attributes. But we also know the third, the fourth and the fifth principle: one Nature for all bodies, one Nature for all individuals, a Nature that is itself an individual varying in an infinite number of ways. What is involved is no-longer the affirmation of a single substance, but rather the laying out of a *common plane of immanence* on which all the bodies, all minds and all individuals are situated. This plane of immanence or consistency is a plan, but not in the sense of a mental design, a project, a program; it is a plan in the geometric sense: a section, an intersection, a diagram.<sup>24</sup>

(Deleuze 1988a: 122)

This chapter locates some key characteristics of Deleuze's reading of Spinoza and describes how these develop or follow the coherence of his wider project to assert the primary value of difference. The first part of the chapter examines the detail of his argument that the critical, creative potential of both being and thinking is located in the distributed but constitutive – *real* (affective, non-representational) – distinctions produced in the encounters between bodies rather than, and instead of, merely nominative distinctions produced between intellectual representations of the static aspects of such encounters. The second part of the chapter explicates the system of thought that Deleuze's differential reading of Spinoza produces. It shows how the insistence on the fully relational or embodied nature of reality introduces a third term that interpolates between the dyads of intelligible essence and sensible appearance, enabling discussion of the 'sense' that 'the body' *makes* in the world. In the third part of the chapter I present Deleuze's argument (in

preparation for discussion of its potential and appropriateness in an architectural context) that the sense making body has two actual forms and a third virtual or informal aspect of *being* which also produce three kinds of embodied or affective *knowing*. The chapter sets out the 'architecture' of this alternative philosophical system delineating a 'diagram' of the operation of the triad of expression, which will then be used as an 'informal principle' for subsequent chapters. However, in order to illustrate the nature of this 'differential' reading of Spinoza, I first proceed with a brief analysis of Deleuze's discussion of Plato's concept of 'The Simulacrum' (Deleuze 2003: 253).

# 1 The difference Deleuze makes

## Deleuze and ancient philosophy

[...] difference becomes an object of representation always in relation to a conceived identity, a judged analogy, an imagined opposition or a perceived similitude.

(Deleuze 1994: 138)

Deleuze argues in Difference and Repetition that contemporary thought, in science, philosophy and common usage, is generally structured according to a 'Cartesian'<sup>25</sup> philosophical position whose origin he traces to Platonism and which he calls 'the classical image of Thought' in reference to its historical status and its continuing prevalence. Deleuze argues that the interpretations of Plato in *Platonism*, which remain evident in Cartesianism and contemporary epistemologies through Kant and Hegel (Deleuze 1992),<sup>26</sup> produce distinctions of knowledge on the basis of a process of identification.

Deleuze argues that there remain strong similarities in principle between contemporary versions of Cartesianism and traditional readings of Plato, in the way that in Platonism 'Copies are distinguished from simulacra by subordinating difference to instances of the Same, the Similar the Analogous and the Opposed' and in the manner in which Cartesianism's 'Universal subject' judges the world according to four representational illusions (1994: 265).

Deleuze's critique is focussed on how this prevalent Cartesianism supports dominant positions and suppresses alternatives through an effective and convenient but reductive and limiting approach to describing and understanding the world. Deleuze forcefully argues that the use of these 'representational' modes of thinking tend to locate the power of judgement in elites, which are able to assert 'common sense' and are thought to have 'good sense', ultimately consolidating hierarchical structures and hegemonies (1994: Chapter 3). In addition and of prime importance for this study, Deleuze argues that the ontologies and epistemologies which we can develop within a Cartesian frame are unable to account for the creative complexities of life or thought, ideas which continue to have great influence in contemporary science (e.g. Deleuze 2002: 23 or Deleuze and Guattari 1992: 351).<sup>27</sup> Deleuze begins his project for a positive alternative to Cartesianism by wondering what '*thought without image*'<sup>28</sup> could be, and finds in Plato himself the first indication of how this alternative might be achieved (Deleuze 1994: 276).

As a consequence of searching in the direction of the simulacrum and of leaning over its abyss, Plato discovers, in the flash of an instant, that the simulacrum is not simply a false copy, but that it places in question the very notions of the copy and the model.

(Deleuze 2003: 256)

Deleuze argues that Platonism sees the purpose of the distinction between the model (*paradeigma*) and copy only as allowing a subsequent distinction to be made between the copy and 'the simulacrum'. According to Deleuze, Platonism selects 'among the pretenders, distinguishing good from bad copies, or rather copies (always well founded) and simulacra (always engulfed in dissimilarity)' (Deleuze 2003: 257). Platonism attempts to assure 'the triumph of the copies over the simulacra', of 'repressing simulacra' and preventing them from 'insinuating themselves' everywhere' (Deleuze 2003: 257). Here the simulacrum is an imposter that only 'pretends' to be a copy of the model.

Michel Foucault argues that Deleuze creates an 'insidious reversal' (Foucault 1994: 345) of Platonism in Plato because he produces an approach whereby the simulacrum may be positively understood as the source of a creative and progressive distinction and selection, rather than erroneous, negative comparisons against a previously agreed identity. Deleuze finds support for his internal reversal of Platonism at the beginning of The Sophist (1997), where an investigation is undertaken in order to distinguish between Socrates and a sophist. Deleuze explains that whilst generally in Platonism a *paradeigma* is understood as some original object to which other things are likened as images, when the Stranger<sup>29</sup> says they need to practice their investigation on an easier model before they embark on the difficult and controversial topic before them, the *paradeigma* cannot merely be a model example of some general concept (Plato 1997: 238).

The model of 'The Angler' that serves as an example for the ensuing discussion in The Sophist is chosen so it is not something 'worth being too



serious about' (239). In the dialogue, a fisherman is defined as using nets as some form of enclosure to catch - 'take possession of' - fish while an angler always uses sharp implements and angling is therefore a form of 'strike-hunting', but an angler is specifically defined as using a form of strike-hunting whereby the underwater prey (as opposed to land-prey) is hooked by a blow which draws the fish 'upwards from underneath' (240). In each case the inability to distinguish between two different activities is overcome by specifying an additional distinction - by discovering the distinction which makes them different. In Deleuze's reading the central process is one of qualitative division rather than quantitative likening. First it divides expertise into production (e.g. farming) or acquisition (e.g. learning), then acquisition as mutually willing or forceful, then forceful as open (e.g. combat) or secret (e.g. hunting). Hunting is divided into enclosure-hunting (e.g. fishing nets) or strike-hunting (e.g. angling with hooks). Once Theaetetus and the Stranger know what kind of hunting the Angler does, they ask, 'What *kind* does the Sophist do?' using the model 'to try and find the Sophist, and see what he is' (Plato 1997: 241-243 *emphasis added*).

The final definition of the Sophist leads us to the point where we can no longer distinguish him from Socrates himself – the ironist working in private by means of brief arguments. Was it not necessary to push irony to that extreme? Was it not Plato himself who pointed out the direction for the reversal of Platonism'

(Deleuze 2003: 256)

For Deleuze, the dialogue of the Sophist discusses the process of making distinctions using a 'method of hunting' in order to categorically distinguish between Socrates and 'The' Sophist, something it is, ironically, ultimately unable to do. The point for Deleuze is that this extreme irony means that it is not the comparison of resemblance between numerous identities but the

serial intuition of the differences between them all that enables a real distinction between Socrates and (a particular) Sophist to be articulated. Whereas categorical distinctions can only be made in general, the Sophist is concerned with making a particular and real decision regarding Socrates.

Here the *paradeigma* acts to indicate how to proceed in an investigation or how to get past a block, and Deleuze concludes that the real purpose of Platonic division is 'not the specification of the concept (division into genera and species) but the authentication of the Idea – not the determination of the species, but the selection of lineage' (Deleuze 2003: 256). He suggests that the selection of a lineage does not suppress difference but instead uses it as its principle because – as a search procedure which selects between divergent lines – it 'repeatedly affirms differences' (256). The dialogue results in a description of a process of distinction that has no definitive conclusion but instead forms a method for continually differentiating between them. Deleuze argues a real distinction enables us to differentiate between Socrates and the Sophist on the basis of how they perform – since both can be *nominally* defined as 'ironists working in private by means of brief arguments' whilst we actually know that they are entirely different animals (256).

The Same and the Similar no longer have an essence except as *simulated*, that is as expressing the function of the simulacra. It is the triumph of the false pretender. It simulates at once the father, the pretender, and the fiancé in a superimposition of masks. But the false pretender cannot be false in relation to a presupposed model [...]. It does not presuppose the Same and the Similar; on the contrary, it constitutes the only Same – the Same of that which differs, and the only resemblance – the resemblance of the unmatched. It is the unique phantasm of all simulacra (the Being of all beings). It is the power to

affirm divergence and decentering and makes this power the object of a superior affirmation.

(Deleuze 2003: 265)

Deleuze's reading of Spinoza contrasts his approach with that of Descartes rather than that of Platonism, but as Deleuze's key source for an alternative to the Platonism he finds in Descartes, his starting point for a prioritisation of difference over identification is epitomised by his absolutely positive account of the simulacra. For Deleuze, Plato shows how the notion of identity becomes an absurd logic that depends on differences whilst denying them. He argues that the simulacrum includes a 'differential' point of view where 'the observer becomes part of the simulacrum itself, which is transformed and deformed by his point of view' (258). He argues that the simulacrum should be seen as a 'vertiginous affirmation' rather than a 'nihilistic unfounding' (263) – an appeal which recognises that the tendency towards Platonist representation is fuelled by a fear of simulacra as the source of all indeterminacy, falseness and error.<sup>30</sup> For Deleuze, Plato distinguishes between identities through a continual differentiation by 'hunting' for real distinctions between kinds of things rather than merely *nominal* identifications. This manner of distinction is of a problematic kind that cannot be categorical but rather needs to be 'continually tracked down and brought into the light' (253). I will now show that the processes of reason which produce real distinctions by or through the simulacrum in Plato are to be found in Spinoza as the concept of *affect*. In Deleuze's reading of Spinoza, this notion of affect continually articulates real distinctions of *kind*, in contrast to Descartes, who is unable to avoid continually confusing the merely *nominal* for the real.

## Distinctly differential

Focusing on the nature of distinctions is in fact what differentiates Deleuze's readings of Spinoza (and Plato) from more traditional analyses, and consequently distinctions are the subject of the first chapter of Spinoza: Expressionism in Philosophy. For Deleuze, Spinoza produces a radical (but subtle) response to the inadequacies of Cartesianism. Deleuze reports that at the very beginning of The Ethics, Spinoza asks how two general 'things' may be distinguished, and then how two substances may be distinguished (meant in the precise meaning of the triad of philosophical terminologies, shared with Descartes, of substance, attribute and mode). For the purposes of an immediate understanding of the following passages without a substantial digression into the organisation of these terms, substance may be thought of as power or potential (of nature or God), attributes as qualities (actual capabilities of things to produce effects such as colour, temperature or pressure) and modes as quantities (actual physical properties or materials with spatial dimensions). Spinoza says that if two things differ by the attributes of their substance, or by the attributes of its modes, then two substances cannot differ in mode, but only in attribute. This is the site of the fundamental difference between Spinoza and Descartes.

Descartes maintains that, *'there are numerical distinctions that are the same time real or substantial'*, which is to say, *'there exist Substances sharing the same Attribute'* (Deleuze 1992: 28). For Spinoza this is absurd: if substances can share attributes then attributes would be distinguished only by their modes, but modes are (by both Descartes and Spinoza's definition) already *modifications of substance* (1992: 30). In order to avoid the ambiguities that this leads to, Spinoza conforms to the view that substances *cannot* share the same attribute, arguing as above that if two substances shared an attribute (if two powers shared the same qualities) then they could only be

*numerically* distinct (they would be different amounts of the same kind of thing), since there would, by definition, be no *real* distinction between them (because they would have the same attributes or qualities) (Deleuze 1992: 31). In Deleuze's reading, this means that whilst Spinoza sets out from a Cartesian framework, the opening of The Ethics is organised around revealing the consequences of this error in Descartes, an error that results in substances 'being reduced to the mere possibility of existence and attributes mere indications of such possible experience'. Substances are only relatively distinct from each other and from their modes of existence, thereby failing to adequately describe the causal process of the production of being (Deleuze 1992: 36). Spinoza conceives attributes to be really distinct, and in so doing, for Deleuze, he does not mean this merely hypothetically, as does Descartes, but that a mental *conception* of really distinct things must be accompanied by a real distinction amongst the *things* themselves for it to deserve the name. In order to do this, however, Spinoza has to conceive of a more abstract notion of substance or nature, arguing 'there exists only one substance of a certain nature' for Deleuze meaning that there 'is only one substance per attribute from the point of view of *quality*, but one single substance for all attributes from the point of view of *quantity*' (Deleuze 1992: 37).

For Spinoza, real distinction is no longer referred to numerically distinguished, merely possible substances, and modes are distinguished without reference to contingent determinations of substance (38). Deleuze argues that this insistence on the real (as in real world, concrete or embodied) nature of distinctions means that everything in the theory is *necessary* for the production of being and serves to describe *and* produce what is either essential, potential or causal actuality, rather than that which is merely imagined as possible. In Deleuze's hands, the triadic structure of expressionism produces the required clarity between a real and nominal

distinction by including in the system the prior relations of difference by which such distinctions are (self) generated. For Deleuze, this is the decisive strategy of expressionism since it makes real distinctions 'capable of expressing difference within Being' and brings about the 'restructuring of other distinctions' (39). Expressionism offers Deleuze an approach that does not see simulacra as lacking value and the cause of a valueless society, but instead sees simulacra as distinctions in themselves, crucial moments and movements of decision and thus instigators and constituents of production.

### The triad of expression

Before all production, there is thus a distinction, but this distinction is also the composition of Substance itself.

(Deleuze 1992: 181)

This is the paradox of expression as such: intrinsic and eternal, it is one in relation to what expresses itself, and multiple in relation to what is expressed.

(Deleuze 1992: 179)

In Deleuze's reading these distinctions involve a triadic structure rather than a dualist one, because each pair of terms has a third, intervening one, and this is the affected or affecting body in which the subject or object is, in fact, expressed for *real*. The new third term of the dyad persists as the reality of the relations between the terms and in so doing it complicates the presumption of reductive correlation between object and thing and idea and representation. This relation becomes one that has an essential relationship to what caused it but a promiscuous relationship to what it causes in a differential logic of expression. This system of thought seeks to address the

paradox of the relationship between the one and the many by insisting on the reality of the relations between them. However, Deleuze argues that the concept of expression must explain how 'the many' constitute 'the one' and 'the one' produces 'the many', because if 'what causes' is a substance *indifferent* to the modes of being that it 'causes', it is merely Cartesian essentialism by another route:

Nevertheless there still remains an indifference between Substance and Modes: Spinoza's Substance appears independent of the Modes, while the Modes are dependent on Substance, but as though on something other than themselves. Substance must itself be said *of* the Modes and *only* of the Modes. Such a condition can be satisfied only at the price of a more general categorical reversal according to which Being is said of becoming, identity of that which is different, the one of the multiple etc. That identity not be first, that it exist as a principle but as a second principle, as a principle become; that it revolve around the Different: Such would be the nature of a Copernican revolution which opens up the possibility of difference having its own concept rather than being maintained under the domination of a concept in general already understood as identical.

(Deleuze 1994: 4 translation changed)

Unless Spinoza is understood as attempting to produce a positive account of difference, his definition of substance may be seen to determine modes of existence, whilst modes of existence may appear to have little affect on substance itself. Deleuze seeks to remove this 'indifference'<sup>31</sup> by giving difference its own concept, such that we do not only think of difference as a negative comparison to identities. In order to do so, he literally begins with difference as a prior relation of production, understood as 'Difference-in-itself' and in terms of a positive understanding of simulacra. Deleuze assumes that the elements of Spinoza's ontology – substance, attributes and

modes – are not fixed or static objects but are explicated as if they were emerging from this 'prior relation', and here the concept of expression is understood as a relational logic which is also generative (for a detailed discussion of this process and the nature of a sui-genesis prior relation see Durie 2002). In this approach simulacra are the moments when 'real' thought occurs, when a 'real' (but virtual) distinction is made between things; in Spinozist terms they are understood as the *affects*<sup>32</sup> which compose substance (and of which substance is composed).

Thus far I have discussed how distinguishing between a nominal and a 'real' distinction is key to Deleuze's differential approach (beginning with difference) but he goes further, using 'a theory of distinctions' (Deleuze 1992: 37) developed from the work of Henri Bergson (1859–1941), to argue that the relation between identities or the names or numbers of things produces two types of numerical, quantitative, distinction (what Deleuze calls 'differences in degree' and 'degrees of difference') as well as 'real' distinctions which are defined as the differences between attributes, powers or qualities (Deleuze follows Bergson to call them 'differences in kind' (Bergson 1988).<sup>33</sup> It is this triadic understanding of distinctions which underpins Deleuze's reading of Spinoza's triad of expression as an entirely relational, differential structure which has no indifference between its substantial character and its modes of existence.

In summary, Spinoza rethinks the representational world through the concept of expressionism and the embodied relations or affects it necessitates. It is through Spinoza (and other sources such as Bergson) that Deleuze finds an approach that does not repress 'the Simulacrum'. This approach is expressed as an insistence on the reality of the process of distinction, of 'difference-in-itself' as a distinct, constitutive phenomenon. This distinct focus permits Deleuze to be described as reading Spinoza



'differentially' but it is also this concept that enables Deleuze's reading to be understood. In the next section of this chapter I will describe how Deleuze's concept of expressionism and its triadic structure of 'expresser – expression – expressed' correlates to Spinoza's meta-physical 'substance – attribute – mode' triad, which, in Deleuze's reading, revolves around the 'generative' process of attribution as a 'double' distinction between substance and modes.

## 2 Attributed knowing

### Differentiating substance

Expression presents us with a triad. In it we must distinguish Substance, Attributes and essence. Substance expresses itself, Attributes are expressions, and essence is expressed. The idea of expression remains unintelligible while we see only two of the terms whose relations it presents. We confuse Substance and Attribute, Attribute and essence, essence and Substance, as long as we fail to take into account the presence of a third term linking each pair. Substance and Attribute are distinct, but only insofar as each Attribute expresses a certain essence. Attribute and essence are distinct, but only insofar as every essence is expressed as an existence of Substance, rather than of Attribute. The originality of the concept of expression shows itself here: essence insofar as it has existence, has no existence outside of the Attribute in which it is expressed; and yet, as essence it relates only to Substance. An essence is expressed by each Attribute, but this is an essence of Substance itself.

(Deleuze 1992: 27)

In Deleuze's differential reading of Spinoza, the distinction of attributes is the qualitative composition of an ontologically single substance: substance is distinguished into an infinity of attributes, which are its component qualities (essences). For substance to have infinite attributes but be singular, Deleuze argues that attributes must be understood as the distinction that composes substance rather than as named qualities – real distinctions rather than merely nominative. Deleuze claims that when Spinoza argues that modes are nothing but attributions of substance he is making attributes into a process of real distinction, whereas Descartes understands them as just *nominally* distinct because rather than productive of modes, Descartes' attributes only *identify* qualities.

Attributes are no longer Attributed, but are in some sense 'attributive'. Each Attribute expresses an essence, and Attributes it to Substance. All the Attributed essences coalesce in the Substance of which they are the essence.

(Deleuze 1992: 45)

Deleuze is at pains to emphasise the active – attributive rather than attributed – nature of this distinction. He goes on to argue that, 'The Attributes are, according to Spinoza, forms of being which do not change their nature in changing their 'subject' – that is, when predicated of infinite beings and finite beings, Substance and Modes, Gods and creatures' (Deleuze 1992: 49). In this understanding, substance is 'univocal' – which is to say the reason for God and the reason for modes (individual existence) are precisely the same. Deleuze argues that Spinoza makes this clear in the corollary to Proposition 25: 'Particular things are nothing but the affections of the Attributes of God; that is Modes wherein the Attributes of God are expressed in a certain and determinate way' (Hampshire 1996: 18). From this point of view, the qualities or attributes of this nature, which make parts

of it distinct from other parts and which ultimately allow for the production of individual bodies, things and objects are also infinite, and it is the distinctions made by these attributes which constitute substance. Here 'nature' is understood as a single substance, the ultimate composition of bodies. Absolutely infinite substance is a composition of infinite attributes, and its nature is of these attributive distinctions, as it is the total of all the attributes which constitute a single substance (i.e. nature). The essence or power of substance is expressed by the attributes, but only so far as it is expressed as an existence (of substance) – as a mode.

Immanence is the very vertigo of philosophy and is inseparable from the concept of expression (from the double immanence of expression in what expresses itself and of what is expressed in its expression).

(Deleuze 1992: 180)

Expression here appears as the attributive double relation between form and absolute, since each form expresses, 'explicates' or unfolds the absolute; that is to say, it says something about 'Nature' (Spinoza's God or infinite substance) but the absolute also contains or 'complicates' (folds together) an infinity of forms: each expression is at one and the same time an exercised capability and component part of 'Nature' (Deleuze 1992: 180). An expression is always this double articulation – in what is expressed and what it is expressive of. Deleuze argues that Spinoza's concept of expression 'asserts immanence as a principle and frees expression from any subordination to emanative or exemplary causality' (1992: 180). It is this double or simultaneous articulation or explanation of the existence of the expression through the expression of existence that makes the theory 'immanent' (without a supplementary dimension) because God does not cause this world from the outside but is part of it, in the sense of a pre-existing relation, by way of the pre-existing relation: expression. Here, the

power of substance is determined through its expression as an existent mode – through the attribution of the qualities of substance in that existence. The tumbling series of expression are at the centre of the continual and iterative double process of attribution that generates modes and in turn modifies substance. It is in this sense that all modes are also expressions of substance, of the power of existence. However, the power expressed by the attributes must be of a different kind to that expressed by the modes, otherwise they would be indistinct.

The production of Modes, it is true, take place through differentiation. But differentiation is in this case purely quantitative. If real distinction is never numerical, numerical distinction is conversely, essentially modal. [...] Attributes are so to speak dynamic qualities to which essence corresponds the absolute power of God. A mode is in its essence, always a certain degree, a certain quantity of a quality. [...] God's power expresses or explicates itself modally and only in and through such quantitative differentiation.

(Deleuze 1992: 183)

In this process of distinction between attributes and modes, what is expressed by the modes is a 'modification' – *a particular* change in the *power of existing* of the body expressing its power of existence, whereas what is expressed in the attribute is *the power of existing itself*. This distinction between attribute and mode is doubled by the simultaneous distinction between attribute and substance. Attribution differentiates simultaneously *qualitatively* and *quantitatively*, producing modes through a quantitative differentiation and constituting substance through a qualitative differentiation.<sup>34</sup>

Substance is, so to speak the absolute ontological identity of all qualities, absolutely infinite power, the power of existing in all forms, and of thinking in all forms. Attributes are infinite forms of qualities, and as such are indivisible. So the finite is neither substantial nor qualitative. But nor is it mere appearance: it is modal, that is quantitative. Each substantial quality has intensive modal quality, itself infinite which actually divides into an infinity of intrinsic Modes. These intrinsic Modes, contained together as a whole in an Attribute, are the intensive parts of the Attribute itself.

(Deleuze 1992: 198)

In this understanding, attribution is a process of distinguishing or 'differentiating' substance (it makes substance *differential*) and substance is a 'qualitative multiplicity', an infinity of attributes which have qualities but not quantity. They have no quantity in the sense that they cannot be counted or divided without changing their nature. However, there is a second aspect of attribution that is also a differentiation. That is to say, the existence of modes expresses an essence of substance, as a modification of the power of acting, by way of instituting a differentiation of degree of an attribute or 'kind' of substance. Hence there may be an infinite number of modifications of a single attribute and the essence of the mode expresses degrees of power of substance as ('intensive') *degrees of difference*, but the existence of the mode simultaneously expresses ('extensive') *differences in degree*.

The individuation of the infinite does not proceed in Spinoza from genus to species or individual, from general to particular; it proceeds from an infinite quality to a corresponding quantity, which divides into irreducible intrinsic or intensive parts.

(Deleuze 1992: 199)

The division into intensive parts is the first stage of the distinction, where essence becomes the potential of an actual existence by first becoming a divisible relation.<sup>35</sup> Intensive differences or *degrees of difference* are for example the differences between different 'whites', that is to say, white is an attribute of substance and *whiteness* is an intensive differential, intrinsic to the attribute white. The existence of a particular white, the existence of a particular mode of whiteness, would therefore have precise degrees of difference from another particular white.

Whiteness has various intensities; these are not added to whiteness as one thing to another thing [...] its degrees of intensity are intrinsic determinations, intrinsic Modes, of a whiteness that remains univocally under whichever modality it is considered. This seems also to be the case for Spinoza: modal essences are intrinsic Modes or intensive quantities, an Attribute remains as a quality univocally what it is, containing all the degrees that affect it without modifying its formal reason. Modal essences are thus distinguished from their Attribute as intensities of quality, and from one another as different degrees of intensity.

(Deleuze 1992: 196)

Substance is pure quality that is distinguished through its attribution as particular qualities in the production of modes which have certain *quantities of quality* and which also have a *specific quantity of those amounts of quality*. This is an example of the serial operation of expression, since what distinguishes the mode is a double process occurring in time – it differentiates itself from its attributes but only insofar as it actually exists as a differential with other modes of existence. What is expressed is only

what actually comes to exist through the expression – a difference of relation with the outside of the expression. The expression that produces that specific affect is a particular degree of the differences of relation with its expresser – a qualitative differentiation or attribution of substance.

When Modes are posited extrinsically they cease to exist in the complicated form that they have while their essences are contained solely in their Attribute. Their new existence is an explication: they explicate the Attribute, each 'in a certain and determinate way.' [...]. Therefore, Modal expression as a whole is constituted by this double movement of complication and explication.

(Deleuze 1992: 15)

Actual modes of existence are here understood as a quantitative distinction, but one which is doubly articulate as an intrinsic *and* an extrinsic mode (complicative and explicative): a simultaneous production of a 'degree of difference' *and* 'a difference of degree'. This latter aspect changes the nature of substance because it changes the conditions of existence and alters the potential of nature – however slight that variation may be. The former is an endurance or consolidation of some aspects of a previous condition of the differences of existence – a repetition of difference. One is the affected body and the other the affect of the body. Here, the object or body is always defined in terms of its expression (En), what it is expressive of (Er) and what is expressed (Ed) and this must be understood as a dynamic - serial - process for it to make any *sense* (see Figure 5).

## Two forms of a body

If we are Spinozists we will not define a thing by its form, nor by its organs and its functions, nor as a Substance or a subject. [...] We will

define it by longitude and latitude. A body can be anything; it can be an animal, a body of sounds, a mind or an idea; it can be a linguistic corpus, a social body a collectivity. We call longitude of a body the set of relations of speed and slowness, of motion and rest, between particles that compose it from this point of view, that is, between unformed elements. We call latitude the set of affects that occupy a body at each moment, that is, the intensive states of an anonymous force (force for existing, capacity for being affected). In this way we construct a map of the body. The longitudes and latitudes together constitute Nature, the plane of immanence or consistency, which is always variable and is constantly altered, composed and recomposed, by individuals and collectivities.

(Deleuze 1988a: 127)

The triadic approach of Deleuze leads to two forms of modal existence, which express the attributes of both thought and extension (to different degrees in different contexts). The first form of modal existence is spatial, **intrinsic** or kinetic – *the expressed* (latitude) – and the other one durational, **extrinsic** or dynamic – *the expression* (longitude). Deleuze argues that these relations of longitude and latitude construct a map of a body, and this field (a plan, a plane), which these maps each partially describe, constitutes nature or substance or 'the plane of immanence' – *the expresser* (Deleuze 1988a: 122). In this formulation, modes are a particular degree of power (of substance), and a particular modification of that power (of substance). Being has two formal dimensions and a third informal one. Modes are a two-fold change in the relations of power: a change in the capability of the body to act, produced by a change in its characteristic relations which endure and enable its actions.<sup>36</sup>

The characteristic relations or properties in which the modal essence is expressed have a certain capacity to be affected, but also 'exercise that



capacity' through the affections which in each moment constitute it (Deleuze 1992: 217). These capabilities and the properties which enable them are expressive of a degree of the power of expression (Deleuze 1992: 217). They are quantitative differentiations – degrees of difference and differences in degree (of difference). The mode has existence by virtue of its relations with other bodies – an infinity of extensive parts which compose the modes existence – and these are in fact also the affections of the body which exercise its capabilities. The mode's expresser is the powers or degrees of essence of substance as attributed to that mode, and the expression of attributed substance is the characteristic relations of the mode and the capability to be affected which these relations have. The capacity to be affected therefore is expressed in the affections of the body, which, in each moment, exercise that capability – which is to say the state of the body is the result of its expression of power and the change in the relationships of power which enabled and resulted from that expression (Deleuze 1992: 217). While the essence of substance may be understood as expressing itself in the compositions of characteristic relations, extensive parts are determined by the relations that they form, from the outside, with all the other extensive parts which are and are not characteristic of this body. A mode is therefore made existent by virtue of the determination of certain extensive parts to enter into composition. The mode ceases to exist once these relations of parts dissolve by entering into another relation, because this corresponds to another, different characteristic essence.

In this reading of Spinoza, the relations of movement and rest - the kinetic aspects of a body - are the enduring relations that are characteristic of the body and are its 'extensive' form. In addition, the dynamic relations of capacity that a body has at any moment, by virtue of its particular arrangement of extensive parts and the relations that compose them, are an 'intensive' aspect of the body. Every body has actual, real degrees of

difference and differences of degree, which are both enduring (characteristic / complicative properties) and dynamic (exercises of capacity / explicative capabilities). All bodies are also related to the real, virtual potential of which they are expressive and which they constitute. In this account, therefore, any *actual* (existing) form – any mode of existence – has an expression and an expressed. It is an *actual*, real entity that has both a formed content (of expression) and a form of expression. The expression is the content of this form as a kind of passing of the present inside (a selected interior or *complication*) and a form of the expression as a projection of that content into the future (a projected exterior or *explication*) – what is expressed. Consequently, while any actual form is a numerical or nominal distinction, it is produced through an attribution and acts also to constitute substance. Substance is the sum of all the modifications in the power of existing expressed by the modes. Here the relations characteristic of a body are inseparable from its capacity to be affected and from the exercising of its capabilities to affect. For Deleuze this means that Spinoza 'can consider two fundamental questions as equivalent: *What is the structure (fabrica) of a body?* And: *What can a body do?*' (1992: 218).

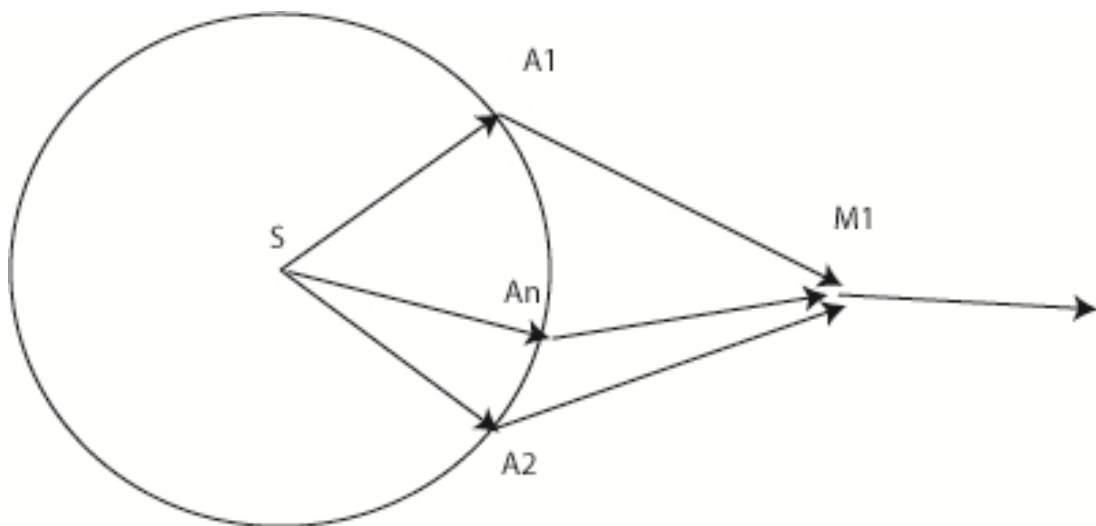
## Thinking and Being

All modes participate in the power of God: just as our body participates in the power of existing our soul participates in the power of thinking. All modes are also parts, a part of the power of God, a part of Nature.

(Deleuze 1992: 146)

All modes, all that is expressed by the attributes of nature, '*participate in the power of God*' – that is to say they are part of nature, constitutive of what nature is and is capable of. Spinoza's concept of body precedes any division

into attributes - such as thought or physical properties ('extension'). Expressions are attributions of substance, which contain the potential of both physical extensive form and thoughts which arise from mental processes. Here, a body may be an amoeba, an architect, an architect's drawing, a constellation, a universe – but it may also be a body of thought or a society of utterances or signs. When Deleuze-Spinoza discuss a body, articulated as a mode, having a modal existence, this may be expressive of any number of attributes. In Spinoza's terms, the thoughts of the mind and the forms of the body are the independent attributes of thought (A1) and extension (A2), but any mode of being (M1) may conceivably be an expression of an infinite number (An) of attributes simultaneously.



**Figure 3\_**  
**Diagram of infinite attributes of substance attributed to a particular**  
**mode of substance**  
 (drawn by the Author)

Deleuze argues that Spinoza's approach excludes causality between ideas and things, between thought and extension, and this sets him apart from a tradition that leads down from 'Antiquity' (Deleuze 1978: 24/01). For Deleuze this move produces the possibility of non-identity with causes, removing a causal chain to replace it with an expressive logic. Instead of the

expression of the world being interpreted as either an object or an idea, here both object *and* idea, in parallel, have their own duality. Thought and extension have independent realities, which are correlative but not related by cause. Thought is independent of extension in the sense that it must be 'caused' by the expression of thought, not of extension: the two are independent. Modes always have two forms – intrinsic and extrinsic – and insofar as our existence is characterised by both attributes of thinking and forming, they will both be simultaneously expressive of thought *and* expressive of extension. Thought is therefore the dynamic attribute of ideas and knowing, and is the sense in which the body is able to form knowledge of affection – being affected and affective. However, it is not the affection or affect itself, but the formation of non-representational ideas through the power of which it is expressive. The event of thinking – as an embodied thought – produces both a form of expression *and* a form of content of the expression. Both express and constitute the 'will to think', which is a formless, virtual but real potential independent of both: affect (or power).

God or nature here are the potential of existence, and our 'soul' (the expression of our being which is not our body) is seen as the proportion of the power of existence that we have the potential to possess or express, and since at the same time we participate *in* nature we also contribute to its composition. This immanent definition of power means that a distinction of existence is also a distinction of knowledge (with both understood as the exercising of different capabilities). It is only then that knowledge is considered in terms of separate attributes – relations of extension or thought. In Deleuze-Spinoza, therefore, a thing (a body) is defined both by the affect it may have on others and how it may be affected – and these affections may be simultaneously mental and physical.

It is absolutely crucial to the understanding of the concept of expression that the two forms of a body – the intrinsic and extensive modes of existence – not be once again conflated to either thought or extension. However, in addition it must be remembered that the dual formal aspects of the body are both actual conditions of the mode, and these are expressive of a third term without which all remains confused: – the difference in power of which the modes are expressive and which in turn produce or constitute them (affect). A key capability of the expressionist triad is therefore how it complicates and explicates the mind-body dualism of Descartes, because expressions can be both mental and physical at the same time (in parallel). The mind and the body may simultaneously share relations with the same virtual expresser but both form different expressions, and may even share physical forms of content (columns + walls) and have different actual forms of expression (modernist / classicist).

In Spinoza's thought life is not an idea, a matter of theory. It is a way of being [...]. In a world consumed by the negative, he has enough confidence in life, in the power of life, to challenge death, the murderous appetites of men, the rules of good and evil, the just and unjust.

(Deleuze 1988a: 13)

Spinoza provides two accounts of the modal triad. He provides one description from the point of view of substance and a second one from the perspective of modes. In these perspectives Spinoza distinguishes man from God and individual thinking bodies from nature (Deleuze 1992: 218). According to Deleuze, when Spinoza begins The Ethics by defining God before proceeding to define human reason, this hierarchy creates a distinction between kinds of affection (Deleuze 1992: 218). God is considered affected in an infinite number of ways, and absolutely unlimited.

God is the cause of everything, the cause of all his affections, and so cannot suffer them. God's affection is not suffering or passion since he causes them – God is wholly adequate because he is the cause of all his own affections – he is *active*. On the other hand, therefore, affection not explained by the nature of the affected body must be explained by the actions or influences of other bodies – it is re-active or *passive*. Existing modes clearly do not naturally meet this requirement, because they do not exist by virtue of their own nature but are expressions of relations with other bodies – 'compositions of extensive parts that are determined and affected from the outside, *ad infinitum*' (219). This distinction means that the affections of existing modes are defined at the outset as, and tending to remain, passions.

In this understanding, whilst both man and God may have an infinite number of affections, man's are limited by means of their cause. Individual bodies, which are part of nature/God, are not necessary to the same degree and do not have the same power of determination. This is the difference between the whole of nature as an individual, and an individual within nature: the whole of nature is infinitely capable of producing itself, whereas an individual is not capable of producing the whole of nature. The distinction between substance and modes, or nature and man, centres on this active character of capability. Nature operates as a whole but is a composition of parts which are themselves wholes. It produces galaxies and bacteria. Nature is absolutely adequate because it is absolutely composed, absolutely necessary; however, individual modes tend to be inadequate, passionate consequences of nature. Capability is entirely defined by the outside but an outside which also forms the interior of the body, insofar as it is part of nature and also becoming distinct. The active exercise of capabilities changes and selects the characteristic relations of the particular mode with its particular capabilities and consequently increases the capabilities of the individual. Man's understanding of nature or God is a process of becoming

more adequate and active because active engagements with the outside of the body increase the body's capacity. Consequently, the mechanisms by which an increase in capacity may be understood and produced are described by Spinoza in terms of three kinds of knowledge of affects.

The whole problem of reason will be converted by Spinoza into a special case of the more general problem of Affects.

(Deleuze 1978: 12/12/80)

Deleuze describes how from Plato to Descartes and from Spinoza through to Kant and Hegel, *The Idea* is a mode of thought that represents some thing. However, whilst Descartes considers ideas as mental objects, producing a theory of knowledge leading to 'representational' thinking, Spinoza holds that ideas and objects are in fact two independent series, which are related by the concept of expression. Deleuze-Spinoza therefore argue that there are other 'non-representational' kinds of idea. According to Deleuze-Spinoza, thoughts are deliberately thought – they are willed – and whilst they all have an object of representation – an idea – they also have an act of will, and the act of will is a different kind of thought to the object of representation. In this way thought is always embodied in a willing body; it is not something independent of an existence of the body which wills, or thinks the thought and has the idea. The thing that I will, the 'thought' that I intend and decide upon, is a representation (an idea), an object of *representation*, but the willing, the fact of willing, is another mode of thought – a non-representational mode of thought. For example, a pain, a love, are 'thoughts' which do not represent anything – any thing – they are not ideas as representations, but relations between feelings and thought. It is a move beyond an understanding of thoughts as static, independent mental objects towards a view of the processes of thought as interdependent, embodied

'thinkings'. These 'events' of thought, or non-representational ideas, Deleuze calls affects (Deleuze 1978: 24/01).<sup>37</sup>

The Latin '*Affectio*' of Spinoza is specifically translated by Deleuze as *Affection*, and is considered a static condition, a specific state of being of a body that has been affected. The Latin '*Affectus*' is translated as *Affect* and is a dynamic transition – the relationship between feelings (affections) and thought (idea); it is literally dynamic because it is the time between affections, during which the body changes between two particular states of affection. The affect is the cause of the thought and must be embodied, because it has existence as a cause only insofar as it produces a change in the body's state of affection. Affect, as a concept that makes thought embodied, is a subtle distinction but it has the profound impact of defining a relational notion of object and identity, since an affect is in actuality always a relation with something 'outside' of the body which is thinking. It is both a relational and a generative concept.

I see Paul who frightens me, then I see Peter, who I like, (who agrees with me). The Idea of Paul reduces my capacity to act, it inhibits me with fear. The Idea of Peter increases my capacity to act, it is agreeable.

(Deleuze 1978: 24/01)

Deleuze uses the example above to show that the state of affection of the body may have varying degrees of 'perfection' or 'reality' depending on how it serves the body. The inter-relationship between a mental Idea and a state of affection means the Idea is significant of a varying degree of 'perfection' in the body's state of being – where perfection is the most agreeable possible state. That is to say that the affection-idea of the relationship between the body's state of affection and its perception of that state, registers the change



in the body and a change in the capacity of the body. Since the consequent change may be considered as either positive or negative (insofar as this is controlled or determined by ideas or an idea) then the capability of the body is changed in either a positive or a negative way.

[...] this melodic line of continuous variation defines Affect (affectus) in its correlation with Ideas and its difference in nature from Ideas. We account for this difference and correlation: it's up to you to decide whether this affect or that affect (change in degree of perfection) agrees with you or not.

(Deleuze 1978: 24/01)

The capacity to act, or power to be affected, is a constantly varying dynamic – the 'melodic line of continuous variation of affect'. In these terms, we never cease to pass from one degree of 'perfection' to another, however minuscule the difference between these states. Here the variation of our state of being in relation to the affect of the world upon us is produced through our difference from or correlation with it – how it changes us, how our idea of the relationship is changed and our will towards it found agreeable or disagreeable. Here the object is understood as a body, and a body is living, dynamic entity that acts and is acted upon – and is in fact defined in this way as 'A life' - a particular case of immanence, a necessary expression of reality (Deleuze 2002).

Deleuze-Spinoza describes the process of developing the capability of affecting and being affected in terms of three ways of living, three kinds or stages of expressions of being, which correspond to three kinds of ideas or knowledge. First, the knowledge we hold of external bodies through the affects they have upon us (signs); second, the knowledge we gain of our own body through these affects (reason) and third, the knowledge we gain

through the understanding that we have of ourselves and external bodies (intuition) (Deleuze 2003a). The triad of expression is therefore always a way of articulating the kinds of knowledge that a body may gain and hold. The development of any individual begins from a nascent state of encounter with signs of existence. This first state of knowledge then leads to the development of the capability of reason, since the relationship between imagination and the world of effects may produce knowledge of the causes of those effects through the correlations of experience. The second state of knowledge produces forms of reason through experience and associations via the imagination, enabling repeatable encounters. These enable development of a third kind of knowledge whereby the relations between the causes which enable repeatable encounters may intuitively be engaged with - which is to say - actively selected.

All bodies are striving for or desiring of agreeable compositions and the minimisation of disagreeable ones – from combinations and reactions between chemicals to individual human beings and social systems. Agreeable compositions (joys) increase our ability to act, whereas disagreeable ones (sadnesses) reduce our capabilities. The seeking of agreeable compositions is induced by it resulting in an increased capability to act – it is joyous. Such is the nature of composition and duration that a body which did not seek agreeable compositions, which did not strive, would cease to exist or would not have duration enough to be considered (affecting other bodies to that extent) as an individual. What drives this striving, as it were, is in fact the potential of entering into agreeable compositions, of augmenting duration, in terms of the actual possibilities which arise to do so, not in terms of an external notion of mortality.

Deleuze gives learning to swim as an example (Deleuze 2003a: 6). We begin with not knowing how to swim, and we are at the mercy of an encounter

with a wave. The wave is composed of an infinite body of water molecules. The water molecules already belong to a body – the body of water, the sea. The first kind of knowledge is then a kind of 'floundering'. We do not know anything about the relation that is composed or decomposed between the water molecules; the wave either carries us or splashes us. It makes us laugh or knocks us over – it affects us passionately. The ideas we have corresponding to the effect of an object on our body depend on our power of knowing, our ability to think, insofar as these ideas are 'caused' by other ideas we have (had) of external bodies – but we have no idea of our body independent of the effects it suffers. We can form no idea of the external object beyond these indications and the capabilities they enable. At this stage of development, the ideas, affection-ideas or signs are in the form of mere 'chance encounters'. This is the first kind of knowledge: signs.

However, this inadequate knowledge of effects or signs is the origin of our capability to create common notions - the second kind of knowledge: reason. When a body is affected, when bodies are in composition, they always begin by simple encounter, but as and if they form more durable engagements, the mechanisms of association and imagination begin to form reasonable, adequate notions of how this agreeable composition was produced, and lead to the development of positive actions which enable it to be repeated. In this understanding our world begins as a world of affection-ideas in continuous variation of joy and sadness, but if this is the limit of our understanding or knowledge of the world then we remain separate from our power of acting; since we are not yet the cause of our affects, they are produced in us by something else and we remain passionate/passive.

A common notion, instead of representing the effect of the body on another, represents the agreement between their characteristic relations. Built up from our catalogue of feelings of fear and excitement is an idea of

correlation of effect, which is a concrete agreement between characteristic relations: a causal understanding. If I know something about the characteristic relations of arsenic and how it might disagree with biological organisms, I am considering the nature of the relationship between these bodies when one is combined with another: I know what affect it will have and, I may predict the answer to the question, *What will it do?* These kinds of questions form knowledge of relations between the characteristic relations of things and allow us to know causes, not effects. A common notion is a principle of reason, a knowledge of the cause of the joyful passion, a principle on which a reason to act one way or another can be constructed. Finding being lifted by the waves enjoyable, or finding more air to breathe above them, induces a desire to compose with them in particular ways. The common notions or reasons we form make us able to compose ourselves with the flows of the body of water, put ourselves in rhythm with its duration or waves. However, common notions are also limited – a common notion does not produce anything but stops at understanding. The third kind of knowledge is the movement beyond this limit, and into creation. The third kind of knowledge leads to the discovery of swimming and diving and surfing and the science of fluid dynamics.

We perceive external bodies only insofar as they affect us. We perceive our own body only insofar as it is affected, and we perceive our soul through the idea of an idea of an affection.

(Deleuze 1992: 146)

In the triad 'what is expressed' is created by the expression, but they do not resemble each other. However, what is expressed has an *essential* relationship with the expresser, although it is not a copy as there is no model. Knowledge of affect through perception is the beginning of knowledge. Knowledge of our body through perceptions of the affects on us

enables our knowledge to develop. Understanding of the knowledge of the affects on our body and of our body enables us to act in the world with intention. This third kind of knowledge is a pure ability of composition – knowledge only of the composition of relations. It is a sense of composition that is glimpsed and felt with the forming of common notions, but while it remains mostly beyond our grasp it can be intuited - sensed through action. Intuition, the third stage of knowledge, is knowledge of the power to act – knowledge of or ability to project the consequences and dynamics of compositional practices by acting joyfully – by performing a demonstration of that intuition in the form of an embodied *sense*.

In Deleuze-Spinoza, the term 'Plan of organisation' is based on transcendent, supplementary dimensions or judgements and is Deleuze's way of characterising representation (*a classical image of thought*). The alternative embodied or non-representational approach (*a thought without image*) is characterised by Deleuze as based on immanent, consistent processes of composition of affective capacities; he calls it a plane of immanence, consistency or composition. He notes that this plane of composition is, however, only a 'plan' in a geometric sense, in 'the sense of a Diagram' (Deleuze 1988a: 128). The third kind of knowledge has the *sense* of a diagram, since the sense, as an embodied existence, is expressed as the affection of another (and therefore 'external') body; it is thus the relationship between the affects between bodies in composition, which is 'planned', or structured, and entirely real – a *plane of composition* – but is not a fixed, material existence – not a plan of organisation. This plane of composition is what is composed by bodies in affective relation; it is the composition of expressive beings – the being of expression. It is a double articulation between the virtual and actual, between the reality of the passage between states and the reality of those states, as a continual serial process of discernment or differentiation.

The term diagram therefore represents the intuitive knowledge we may gain of our own power of existence – the power of action that changes and constitutes the virtual potential of the world, substance or nature. The diagrammatic is knowledge of power as an embodied knowledge of action and how to act, rather than the discursive record or expression of that knowledge. This third kind of knowledge is an activity of a body composing itself and the world around it. The activity of affective composition is the body's participation in the diagram of power, which produces its subjectivity and to which the emerging subjectivity of the body contributes: it is knowledge of the essence of substance through directing its production. It has 'the sense of a diagram' because a diagram indicates our knowledge of the formless relations between senses, and in so doing describes the limits of our abilities whilst extending them. The informal diagram is real; we demonstrably have and are able to form knowledge of potential, of the relations between relations through the creation of new situations, events, unexpected things and problems.

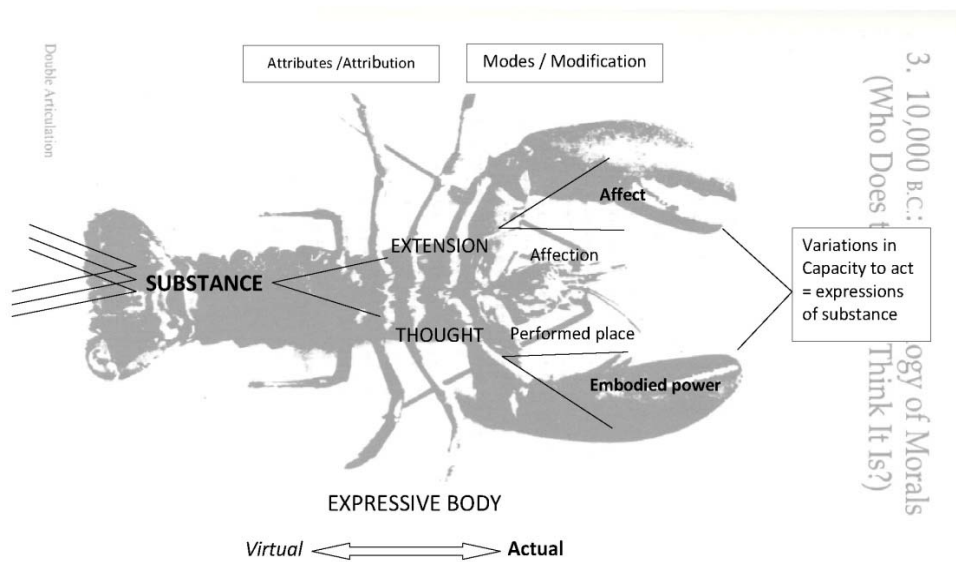
### 3 The sense of a diagram

#### A diagram of expressionism

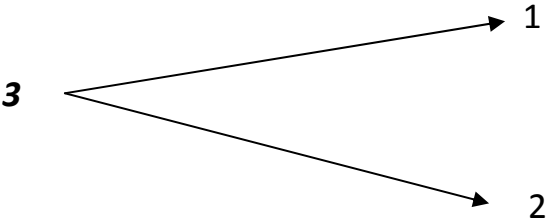
Ethical joy is a correlate of speculative affirmation.

(Deleuze 1988a: 29)

In A Thousand Plateaus, Deleuze introduces the chapter '10,000BC: The Geology of Morals (Who Does the Earth think it is?)' with an image of a lobster entitled 'Double articulation'.<sup>38</sup> My overlay on the lobster image,



**Figure 4\_**  
**Deleuze's diagram of double articulation as a lobster**  
Original illustration in grey with overlay by the author in black



**Figure 3\_**  
**Diagram of a two-form, triad**

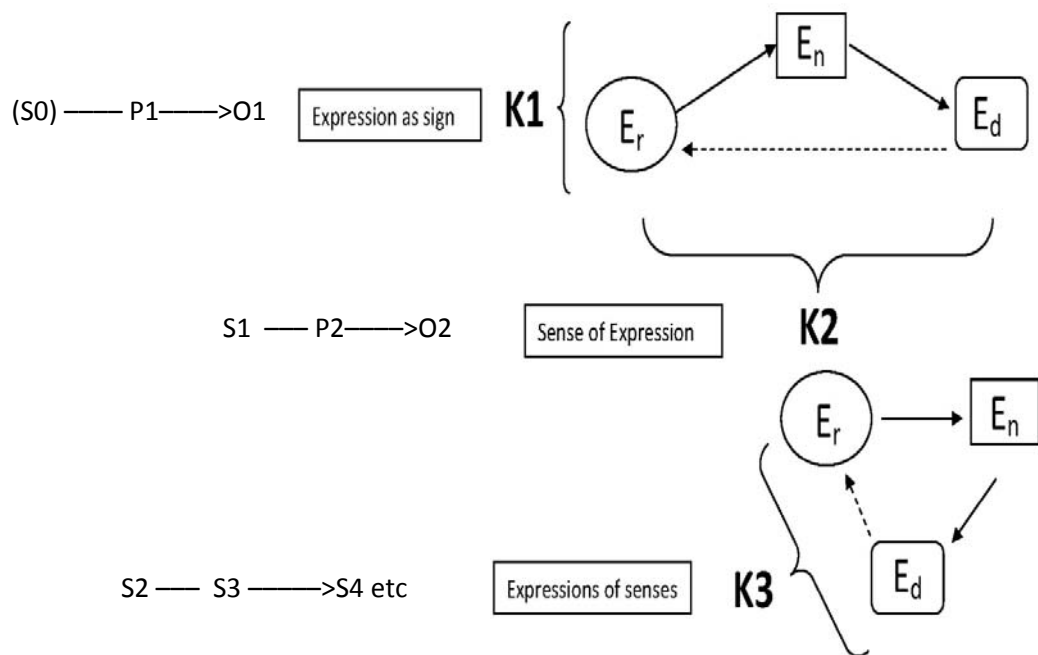
above, attempts to emphasize the triadic, two-form architecture of Deleuze's approach with respect to the theoretical arguments of this document. The lobster is divided into three aspects – substance, attributes and modes. Substance is the whole of the past of the lobster in nature and all that the lobster does to alter that nature through its attribution of that substance in its modes. The formal qualities of the lobster are therefore its particular attribution of substance, but the lobster modifies these attributes through its actual forms. Its existence has two modes, which are its intensive and extensive quantitative states – its present characteristic relations (indicated as *performed place*) and its present potential (indicated as *embodied power*). The expressions of substance attributed to the lobster as modifications have both a particular, characteristic composition and a capacity to act – both a formal reality in space and a formal reality in time. For Deleuze's arguments to remain coherent, the lobster ought to be shown pinching its own tail, indicating that there is 'reciprocal determination' between substance and modes and that they do not remain 'indifferent'. For example, over time these dual forms or actual conditions reciprocally determine substance by producing variations in the capacity of acting of all the bodies they are in relation with. The lobster might immediately pinch a fisherman or decompose to produce oil; alternatively, the whole of the past of the body designated by the term 'lobster' might produce a bizarre and intricate mating ritual that appears to the wildlife narrator to be a form of dance as tender as human lovemaking.<sup>39</sup>

The principles of a Deleuzian epistemological approach are articulated here in a *triad* of expression that produces, and is constituted by, **two-forms**. This triad is expressed as a propagating, diverging series where **actual forms** determine the subsequent *virtual* potential of *forming*. The aspect repressed in the dualist understanding, and which produces a triad when it is made



explicit in an expressionist approach, is the expresser or 'what expresses itself' which is a virtual but real potential of forming. This has a paradoxical relationship with 'the expression itself' and 'what is expressed'. In the diagram above, how the actual forms (what is expressed and the expression itself) may affect the virtual expresser (what expresses itself) is indicated through the out-of-sequence numbering (i.e. beginning with 3). However, this diagram only implicitly designates the embodied nature of these relations: Deleuze's lobster is no joke, it is intended to communicate the absolutely specific and concrete nature of these concepts by showing it embodied in an actual lobster.

### Sensing expressions



**Figure 5\_**  
**Diagram of the three kinds of knowledge**  
 (based on Deleuze's account of sense making in *Logic of Sense*)

Deleuze provides an example of the diagram of expression operating in an embodied process of gaining knowledge or, 'making sense', using a linguistic exposition in Logic of Sense (e.g. Deleuze 2003: 22). In summary, Deleuze says that whilst we may make a statement of such and such, we cannot in the same expression state the sense of the statement.<sup>40</sup> While we are talking, we cannot simultaneously say what we mean by what we say except, by-the-way, subsequently using another expression or statement. This may be described thus: Expression P1 designates object O1 and produces sense S1. This sense in turn becomes the Object of expression P2, which creates sense S2 designating S1 (In the diagram below, K1, K2 and K3 refer to three kinds of knowledge. Er = Expresser; En = Expression and Ed= Expressed).

Here it is important to note how the sense made depends on the relation between what is expressed (Ed), the expression (En) that serves to express this and the expresser (Er) that expresses (produces expressions which produce what is expressed). There is no direct object-subject relation, but always a third term that is the location of sense – A (specific, actual) body. The body in which the expression is expressed is the site of the existence of the power (or essence) of the expresser. For example, when an utterance is produced as part of a language it expresses something of the power of language as a whole but only insofar as it makes sense, insofar as it actually does express the power of language by producing sense. Just as the sense that it makes is caused by the particular actual expression and not 'language' – since it is not 'language' in general that affects us, but its specific actual expressions – such an expression only makes sense because it is a variation in the power of language as a repetition of expressions in series. The expressions of language affect us and produce sense; this sense is then an expression by which we are able to affect others.

Here the process of expression is the process of attribution and the expresser is a substantial whole – language – that is virtual yet completely real. The actual instances of language constitute it (language continually evolves, depending on how it tends to be used) but language is a real potential that exists beyond (before) an actual instance that expresses it. This prior relation of expression is constituted as the conditioning of sense-making that has been produced through all previous utterances – insofar as these have conditioned the sense-making of the population (of these linguists). If the utterance is not part of language, it will have no power to produce a sense of that language, but becomes part of the language by virtue of it being (repeatedly and differently) uttered as part of contemporary sense-making actions conditioned by previous ones. Therefore, if 'language' might be said to be the real (virtual) potential of sense making – which enables sense to be made – it might be said to (actually) exist in two simultaneous and interlocking ways – both as an expression of the potential of language which characterises the nature of the expressing body *and* as an exercising of the capability for the real potential of language to be expressed. The informal expression of language (or other attribute of substance / kind of power) is a diagram that has two formal aspects – a form of content (of the expression) and a form of expression. Sense is neither *langue*<sup>41</sup> or *parole*<sup>42</sup> but the intuition of language – through the exercising of its power – through these dual articulations. I will expand on aspects of this discussion in chapter four with respect to Peter Eisenman's linguistic analysis of architectural form.

Any utterance has an actual form (of content) that enables its potential as a sense-making vehicle (a particular set of words in a particular order, using forms of language which are common to the audience being addressed). It also has a form of expression that is the vehicle by which it makes sense (the manner through and by which the sounds of speech, inflections and

accompanying gestures are heard and understood). In addition it has a diagram that enables those things to be said in that context. The diagram is at once both technical, composing the potential to be understood, and social, composing the potential of being heard. If we are ever physically able to say anything at all, it is only because we are simultaneously, socially able to do so (and vice versa).

The substance of language may be understood as a single, univocal power with an infinite number of attributes. Our utterances and the sense we make of them are individual modes that may have multiple attributes and are the expression of the essence or power of language. The substance of language is a unitary power that has as its essence its expressions or modes. Substance and modes are not *indifferent*, but instead absolutely interdependent, conditioning and constituting each other through the productive distinction of expression. Expression therefore always both conditions and constitutes, always produces actual instances which both express prior potential and simultaneously change the subsequent potential that may be expressed. Expression therefore is always a double process if it is considered from the actual, real 'middle' – which is to say, from an embodied perspective.

However, because these relations are embodied and their expressions limited but not absolutely determined by the structures of affection of language, the powers or capabilities which enable us to use language are the same powers or capabilities which constitute our knowledge of it. We know how to speak not because we know the rules of grammar, rather we know the rules of grammar because we speak to be understood. Our capacity to speak and be understood is increased through repeated attempts at speaking into contexts of understanding. What we say tends to correlate to the representation 'grammar' because grammar has been produced in an

attempt to describe (correlate to) the structure of potential communicable utterances. The knowledge of the potential of speech (to be understood) is an intuitive knowledge of the formless relations between senses (the expressions of senses) that uses as its evidence the reasons or necessities of the sense of expressions – which are constituted by signs of expressions and expressions of signs.

### The expression of ethics and aesthetics

Ethics [...] replaces Morality which always refers existence to transcendent values. Morality is the judgement of God, *the system of judgement*. But ethics overthrows the system of judgement. The opposition of values (good-evil) is supplanted by the qualitative difference of Modes of existence (good-bad).

(Deleuze 1988a: 23)

The expressionist notion of embodied knowledge acts towards an increase of capacity through striving towards the outside, because the only way to produce and increase sense is through open affective relations with external bodies. Learning to speak requires being heard. In this approach, the disciplining, categorising nature of dualist knowledge production is insidiously reversed, so that the forms or functions of an object are no longer thought in terms of identifications with good or error but as qualitative differences between modes of existence. In this understanding there is no advantage in asserting the existence of one beautiful form over all others, but striving to make more agreeable ones, in particular times and contexts for particular purposes, is an ethically joyful, speculative practice. Creative activity towards the outside of the subject is an ethical affirmation because it is an affirmation of the qualitative difference between modes of existence, rather than a transcendent system of judgment. It is a real, immanent and

specific – embodied and felt – distinction, rather than a merely nominative or representational one. The opening of the body to be affected by the outside is an immanent ethical negotiation with the world, which is speculative in the sense that the outcome of this encounter is not pre-determined but simultaneously affirming of the reality of the potential produced through external encounters. It is an active, joyful affection of the body in the sense that it is an increase in the body's capacity.

In Deleuze-Spinoza's expressionist ontological system, it is joy that drives the production of life, because we must have a positive, joyful conception in order to form a common notion, which nevertheless must comprise both negative and positive aspects in order to overcome the passive understanding of effect (without a positive intention to determine an outcome we would not construct a reason by which we could do so). In turn, the effort of creating intuitive actions is a pure expression of the joy of speculation as the active pathway to an increase in capacity. Deleuze argues that this is where Spinoza poses the central question of his ethical analysis. How might we ensure that our passions take up the smallest part of us? How might we be free? Deleuze describes the sense of joy as 'the truly ethical sense' because 'Spinoza's naturalism is defined by speculative affirmation in his theory of substance and by practical joy in his conception of modes' (Deleuze 1992: 272). It is in this sense, therefore, that the formation of embodied intuitive knowledge is at once a creative, expressive undertaking *and* an ethical practice.

Ultimately, then, the diagram of expressionism is the insistence that reality has three components not two; that the differential power of the expresser always precedes the formation or functioning of any aesthetic or ethic. We begin with that which *expresses* in order to avoid a reductive identification of the expression with what is expressed and the ensuing internal conflict of

prioritisation. The dualism of representation only allows this identification to be performed from either one of two external and reductive perspectives: one outside the situation in time (what is it in essence?) and the other outside the situation in space (what is it in appearance?). Rather than taking a complex phenomenon and removing either time or space in order to reduce the problem to identification between instances or states, non-representation instead articulates it twice, in parallel. When we look at any expressive object, person, drawing or problem non-representationally, we must always articulate two simultaneous questions: of what is it expressive *and* what does it express?

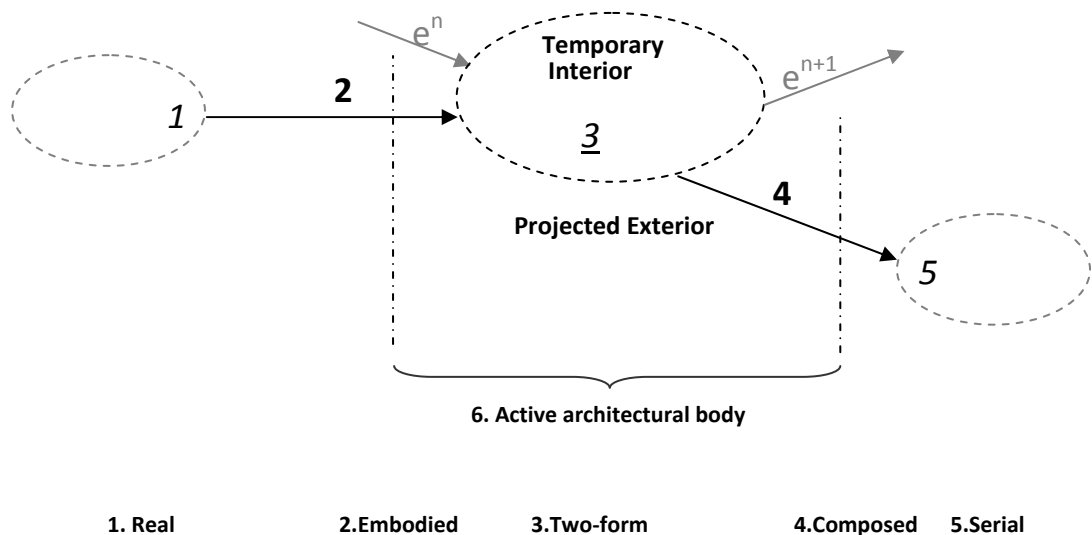


Figure 6\_  
Diagram of expressionism in architecture  
(for a design-research methodology)

This then, is the diagram of expressionism: being and knowing are expressed in series through a *triad* of aspects with **two-forms**. This understanding may be described in six principles. First, the Expressionist understanding is produced through a system of thought that holds the differential relations between objects and subjects to be real – productive and constitutive distinctions of Being (and Knowing). Second, these distinctions of *being* are

therefore embodied, involving the body, neither subjective nor objective but absolutely specific – concrete. Third, a body in relation has two directions or articulations – how it selects itself and how it projects itself. Fourth, the *real* discernments of a two-form body which produce and constitute its subjectivity and objectivity are encounters outside of habit – by definition produced through creative compositions of external relations. Fifth, the Expressionist understanding is *serial* and only makes sense over and across time. Representation reduces the understanding of time to a repetition of the same; Expressionism is a continual repetition of differences. The sixth principle concerns the active constitution of an immanent, ethical architectural body which operates in explicit affirmation of its relations outside of itself.

Chapter two will examine how this diagram operates in architectural epistemologies and practices. Chapters three and four will explore the implications of attempts to employ or follow this diagram in the practices of Koolhaas and Eisenman. In chapter five, this diagram will be explained in terms of the relative affect between bodies in composition, in order to identify key encounters in a creative process. Finally, these five principles can only be properly articulated through enactment, and the sixth principle of a Deleuzian design-research methodology is addressed in chapter six through discussion of a range of architectural practices which have attempted to embody the principles of this diagram of expression. Each of the various illustrations in this document, each individual chapter, the structure of the document as a whole and the design-research and pedagogic practices it describes (as well as, I would argue, much of Deleuze's work subsequent to Spinoza: Expressionism in Philosophy) are attempts to articulate the expressionist diagram that Deleuze finds in Spinoza's Ethics.



## 2\_Translating expression

Robin Evans describes traditional architectural theory as a 'transmundane see-saw between form and function' and argues that architecture needs to find an approach that sees society as 'neither a giant artwork nor a mammoth boiler house' (Evans 1997: 32). Evans is not the only theorist to bemoan the vacillating dualism that appears to underpin the majority of theoretical accounts of architectural knowledge, nor to argue that these failings are enduring and have significant social impact. Adrian Forty, for example, has traced the origin of the dualist form/function paradigm<sup>43</sup> and its association with aesthetics or ethics back to the year 1740, when architecture's first use of the mathematical term *function* immediately caused divergent interpretations. Forty records that the account of Friar Carlo Lodoli attempted to employ the analogy to describe and determine an architectural *aesthetic* that expressed the compounds of forces in the material components – claiming 'nothing should be represented which is not true of function'. These claims were, however, readily re-presented by Francesco Milizia as an *ethical* argument against excessive ornament (Forty 2000: 175).

Forty argues that the persistence today of these divergences in interpretation or emphasis of the relation between architectural form and social functions – between one of aesthetical representations of essences and another of ethical determinations of appearances – is significant of its importance as a problem. Forty argues that the problem of this relation between architecture and society, or 'the practical need to talk about the relationship between buildings and the life within and around them', requires architectural theory 'to replace function, or else to purge function of its environmental determinist connotations' (Forty 2000: 195).

There is much agreement between theorists that this dualist epistemology is both prevalent and inadequate, but the majority - like Forty - ultimately argue that one side or other of the dualism needs revision or has been 'mis-' or under-represented. For example, Colin Rowe sees the dualism as practically inevitable and, therefore, the choice between form and function when accounting for design practices a matter of taste and balance. Between 'paradigm or programme' he favours paradigm but also recognises that a reliance on one or the other is 'impoverishing' and insists that we should maintain a dialectical discourse between them (Rowe 1997: 39). Whilst many of Evans' contemporaries implicate the dualist nature underpinning architectural epistemology when offering critique of existing theoretical accounts, they differ from him in a number of important ways, in both their analysis of the problems this causes and what needs to be done to overcome these inadequacies in our accounts and practices. Evans describes the everyday consequences of such a dualist epistemology as a highly partisan division between 'artistic' and 'professional' camps, and like Forty (and Jonathan Hill, for example) believes that one account is clearly dominant over the other. However, Evans' focus is not literally to redress the balance of this interminable see-saw between form and function but, rather, to remove the repetitive oscillation itself in order for us to make better sense of the creative processes of architecture.

This chapter places Evans' discipline-specific critique of architectural epistemology, which he labels 'picture theory' in relation to Gilles Deleuze's general, philosophical critique of dualist - 'representational' - epistemologies in order to establish the appropriateness of a Deleuzian approach for the construction of a non-representational alternative to the traditional account of architectural epistemology. A brief intersection with the Critical architectural debate and the wider architectural use of Deleuzian concepts such as 'the diagram' enables this study to establish a definition of the Deleuzian diagram in architecture. The exploration of the relationship

between a Deleuzian epistemology and Evans' account of the construction of architectural knowledge placed in the context of the Critical architecture debate illustrates the proposition that an adequate epistemology for architecture needs to account for the projective, constitutive relations of sense across a whole production process rather than rely on a common-sense assumption of translative correlation between pictures, imagination and objects.

## 1 Evans, Deleuze and the Critical project of architecture

### The Interminable see-saw

[...] so architects might conceivably combine, in such a way as to enhance both, the abstract and the corporeal aspects of their work. Instead, they stand next to each other, in an unpropitious sort of way, as alternative candidates. [...]. I should like to avoid this partisanship, so much more effective in drowning out sense than articulating it.

(Evans 1997: 161)

Evans characterises traditional architectural theory as being dominated by an account that seeks 'to place the abstract and instrumental' into 'a culpable professionalism of pragmatic form-making' and in so doing repress alternative approaches (161). He argues that those concerned with an ethical opposition to this 'professionalisation' of the discipline tend to aim to do so through an 'emphasis on the direct and experiential'. This is manifested as a wish to see the architect as an artist with a direct relationship to the object of production, dealing in phenomena like either a

sculptor, through direct physical manipulation of the art object, or a painter, with the architectural drawing a proxy for the canvas (160).

Evans dismisses the concept of 'architect as sculptor' on several counts, the most prominent being that he feels it serves as a retreat from the social and political scope of architectural activity towards a much more limited and literal engagement. The second, 'architect as painter' approach, Evans considers as particularly attractive to and prevalent in architecture schools, where, he argues, the architectural drawing can take on a role 'similar to that of early twentieth-century paintings' (160). He objects to this second approach by arguing that there are things which cannot be directly 'drawn' or pictured (James Turrell's installations providing him with one example) but his main criticism is that, in this understanding, drawings become merely 'innate repositories of effects' (160).

For Evans, these concepts of the architect as either sculptor or painter both rest on one side of the dualism because both have the aim of 'emphasising the corporeal properties of the things made' and share an emphasis on 'involvement, substantiality, tangibility, presence, immediacy, direct action'. In contrast, the dominant, diametric approach – the professionalisation of the discipline – places emphasis on 'disengagement, obliqueness, abstraction, mediation and action at a distance' (160). In Evans' narrative, whilst the 'art of architecture' emphasises a direct relation to a sense object, it is designed to mythologize the creative impetus and unable to include the 'explorative, pre-emptive' determination of a built object through the abstract means of the architectural drawing. On the other hand, Evans finds that a more abstract understanding of the design process has become reduced to a simplistic system of codification so that it may be owned and exchanged through drawn products, which serve only as tools for construction (160).

Evans seeks a fuller explanation of the role of the architect and the products of his processes, and finds this discussion between professional practices and artistic endeavours a 'contest between two kinds of dullness'. It is clear to him that both the concept of 'the architect as sculptor or painter' and the professional account of 'the abstract and instrumental' power of the drawing are fatally limited in articulating 'sense'. Evans argues for a new approach that releases the abstract and instrumental from 'the dullness of its professional application' in order fully to appreciate the mediated nature of the architectural drawing, so that it may simultaneously account for its 'corporeal' aspects (Evans 1997: 161). I argue in what follows that Evans' focus on a concept of sense making (which includes both notions of specific embodiment and intellectual abstractions) is both strongly correlative with a Deleuzian triadic, expressionist epistemology and a distinctive position with regard to the discourse on Critical practice in architecture.

## Critical positions

Jonathan Hill provides an account of architectural history that, like Evans, emphasises the central, creative role of drawing processes but also relates the epistemological distinctions identified by Evans to a historical tendency to articulate the discipline of architecture in terms of a division of labour between doing and drawing (Hill 2007: 166). Hill both records the ancient origin of debates over the ethical role of formal architectural practices and links these epistemological questions directly to the contemporary 'Critical architecture' discourse. He argues that the tendency to articulate a division between an intellectual process of 'designing' and the practical involvement in 'messy construction' was made explicit as early as the 1450s by Leon Battista Alberti (Hill 2007: 166). According to Hill, this division, which made the drawing 'essential' to architecture and which consists of understanding drawing as the process of 'drawing forth ideas', has an opposite pole, that of plain appearance, which Hill calls 'the drawing of appliances' (Hill 2007: 166).

Hill argues for the 'drawing forth of ideas' to be properly valued because he sees the dominant professional application of the drawing limiting the creative role of *both* the user and the architect in the process of design (Hill 2003). He argues that these limits are instituted by 'the profession's desire to manage capitalism's excesses and reduce the threat of economic and social disorder', and therefore represent 'a significant hindrance to *critical* architecture' (Hill 2007: 167 emphasis added).

Whilst Hill argues that the limitation of the creative role of the architect and the user in design are in part produced through the tendency of contemporary professional practices to reiterate historic divisions of labour in order to maintain dominant systems of production – implying that an architecture attempting to overcome the creative limits placed upon it would be required to be *critical* of those capitalist modes of production – this is by no means a consensus view. Jane Rendell argues that much of the contemporary Critical debate revolves around a contested notion of the autonomy required by the architect to act as a creative or critical impetus against the tendency to professionalise and control their outputs within a capitalist cultural, social and economic system. She characterises this debate regarding the nature of the ethical value of formal practices as oscillating between the two divergent positions of Michael Hays in his paper 'Critical Architecture: between culture and form' and a contribution by Robert Somol and Sarah Whiting entitled 'Notes around the Doppler effect and other moods of modernism' (Rendell et al 2007: 2).

The influential account of Hays may appear to superficially correspond with Evans' view, as it argues that a Critical architectural practice occurs somewhere *between* 'resisting cultural determinism and recognising that (formal) autonomy is required for engagement' (2). Likewise, but on the other hand, in a paper credited with coining the phrase 'post-critical', Somol and Whiting also apparently agree with Evans that it is the dualist

underpinning of architectural theory itself that needs to be overcome. They claim that the debate itself has become a process of 'infinite regress' that is 'inevitably and centrally preoccupied by its status as representation and its simultaneous commentary on that condition' (Somol and Whiting 2002: 74). These two papers mark theoretical strands which are interwoven<sup>44</sup> with the articulation of the prominent contemporary architectural practices and approaches of Peter Eisenman and Rem Koolhaas. Both positions claim to produce understandings and practices which challenge the dualist epistemologies that Evans and Deleuze decry.

With *both* poles of this debate ostensibly in agreement with Evans regarding the inadequacy and prevalence of the dualist manner of thinking about architecture - but placing strong emphasis on either performed instrumentality or formal autonomy, it is clear that traditional dualist epistemologies remain heavily implicated in the contemporary Critical architecture debate. Clearly, therefore, Evans' propositions retain contemporary relevance, and are an apposite territory of investigation with respect to the necessity of providing more precise distinctions between 'ordinary' and 'Critical' architecture. To aid this process of distinction, I will further discuss the alternative approach of a 'third strand' of commentators, such as Ghirardo, Rendell, Hill, Heynen and others, who raise serious reservations about both of these prominent accounts with respect to what it means to be a 'Critical' architect. Firstly, however, I will briefly investigate these two prevalent, 'Critical' and 'post-critical' positions.

Michael Hays argues that he makes an attempt to escape representational positions on either side of the 'pervasive dichotomy' of the dualism between essence and appearance – by situating the artefacts under discussion 'in-the-world' (Hays 1984: 17). Hays' 'critical' description of architecture 'claims for itself a place between the efficient representation of pre-existing cultural values and the wholly detached autonomy of an abstract formal system [...]

it is a challenge to those views that claim to exhaust architectural meaning in considerations of only one side or the other' (15). Hays arrives at an oscillation between positions which either see 'architecture as instrument of culture' or 'architecture as autonomous form' (16). However, in the same 1984 issue of *Perspecta* as Hays' paper, Diane Ghirardo claims that this and all the prevalent accounts of the relationship between architecture and society remained 'deceitful, reductionist and self-serving' (Ghirardo 1984: 114). According to Ghirardo, these positions took the form of architecture 'as art, as fashion, as feeling and as a series of evasive manoeuvres between' – all of which, for her, speak of 'a monumental refusal to confront serious problems' and avoid 'a critique of the existing power structure, of the ways power is used and the identity of those whose interests power serves' (114). She concludes that the relationship between architecture and society will only have substance when architecture takes responsibility for all the ramifications of the process of building. Ghirardo's brief but forceful account consciously echoes earlier criticisms made by Manfredo Tafuri.

Ghirardo argues that powerful American theorists such as Hays and Eisenman<sup>45</sup> have come to claim a continuing Critical project in line with the ambitions of Tafuri (therefore critical with a capital C) despite the fact that he was explicitly critical of their approach (Ghirardo 2002: 38-47). Ghirardo claims that this wilful<sup>46</sup> misinterpretation comes from a reading of a 1974 essay by Tafuri published by Peter Eisenman in the journal *Oppositions*, of which he was editor. The text was preceded by a three-paragraph editorial taking a very specific attitude to its presentation of aspects of Tafuri's critique. Whilst in the body of the essay Tafuri decries the inadequacy of the trend for post-war architects to resort to rhetorical devices akin to 'the magical realm of language', in the editor's hand this critique is used to identify 'language as a technical neutrality', as one of three techniques which still provide 'possibilities for criticism'. Whilst Tafuri clearly holds disdain for 'the new knights of purity' who engage with linguistic structuralism to



stimulate their formal architectural practices – Eisenman, for example – this is understood in this American context to be a critical method he supports (Hays 1998: 291-316).

However, the ascription of a 'Critical' label to precisely the practices Tafuri disparages goes much further than inaccurate reading of Tafuri's text acting to deliberately maintain a highly partisan and negative presentation of Tafuri for contemporary audiences. For example, Hays recently presented Tafuri as 'resigned to the necessary suspension of effort until such time as society itself has reconstructed the material preconditions for consensus and meaning' (Eisenman 2003: 202). In fact what Tafuri argues in his contentious essay is that all four of the 'current' trends he characterises are part of 'a history of attempts towards a comprehensive organisation of intellectual work within the relations of production.' He continues: 'The task of criticism is then to recognise these attempts, to favour them in the field of historical analysis and to cruelly reveal their deficiencies and ambiguities, thereby making it readily known that those unanswered problems are the only ones worthy of "political" action' (Hays 1998: 313). Rather than a suspension of effort until such a time as design is no longer complicit with capitalist production, Tafuri argues that it is the precisely the current situation - embroiled within a capitalist system - which requires architecture to explicitly address its production processes and the problematic divisions of labour, which, according to Hill's analysis of the current situation (Hill 2007: 166), they continue to institute.

The question criticism poses to that which we can no-longer name architecture but rather a general organisation of building processes, must be the same one it asks itself; that is, in which way does criticism enter into the production processes?

(Tafuri 1987: 10)

However, a complex and important point for Tafuri is that the power of criticism must enter into the production process not only of the disciplinary practices subject to criticism but also the production of criticism itself. In Tafuri's configuration, autonomy must account for the transformation of the architect *and* the transformation of society, which occurs through and defines an 'autonomous' act of form making. To be critical means to neither restrict oneself to a discussion from within the disciplinary hegemony nor attempt to do so from its pure outside. Hays' argument, on the other hand, is that the critical moment when architecture makes itself distinct from the culture in which it sits is a moment of cultural autonomy. For Hays it is in the moments of decision that the architect makes between *culture* and *form*, that 'the Critical' is ultimately established – 'between architecture and that which is *other*' (Hays 1984: 14 emphasis added). In Hays' account it is this ability to sit outside of culture (to be other than culture) that enables the architect to examine how the forms they create might then 'resist' becoming merely 'a conciliatorily representation of external forces' or be 'opposed to dogmatic formal systems' (Hays 1984: 17).

Hays' oscillation between culture and form appears to mean between the cultural determination of taste in architectural forms *and* the production of architectural forms that are seen as favourable for culture – all of which could be seen to sit within the commercial potential of the discipline if your perspective is that the discipline should be so opened to a critique of the processes of production that it can henceforth only be referred to, as Tafuri would have it, as a *general organisation of building processes*. Whilst Hays is concerned with a definition of architecture that does not include wider production processes in the manner Tafuri would like to see, he still seeks to give these practices the label 'Critical', seeing a necessary power of resistance from cultural or social habit in order to create new architectural forms. This is an important point of distinction in this discussion, because, for example, Hilda Heynen, who operates from an explicitly Tafurian

perspective, also argues that architecture can only critically reflect upon its social condition because it has 'the possibility of an *autonomous* moment, a moment when it is not entirely determined by heteronomous forces or requirements' (Heynen 2007: 50, emphasis added).

Both Heynen and Hays, and also, as I will show in the next section, Somol and Whiting, consider the site for this moment of agency to reside in the individual architect, operating as a member of the discipline in the context of a wider society from which they are held distinct. However, in Heynen's argument the critical moment is articulated as a release from *social* determination, rather than a 'cultural' one. Compared to Heynen's heteronymous notion of the 'social', Hays' account of 'culture' appears to be a realm from which much of politics and issues of social division are by definition already excluded as 'other'. Hays' differentiation of architecture with what is outside of it may be taken to presuppose the conditions of its interior and base itself on a principle of disciplinary identification. Tafuri's intention to define the discipline as a general organization of processes outside of itself, and to include its own identification or boundaries in the critical discourse of these activities, might be used to draw a distinction between these respective 'social' and 'cultural' perspectives on autonomy. Therefore, for the kind of autonomous agency of architecture thought to be critical with a Tafurian capital C, it may have to be inclusive of what lies outside of it, through being *explicit* about its enabling relationships with *the social*, rather than only *implicitly* critical of them – that is, from within the usual 'cultural' boundaries of what determines the production process of the discipline. In these Tafurian terms, wherever the boundaries between discipline and society are drawn they must not exclude from that discourse the power of the discipline to produce the form of autonomy of which it speaks, and the benefits it enjoys. Here, the differences of emphasis in the Critical architecture discourse appear to revolve around just how open a definition it may bear and retain its potential as 'Architecture'.

In a non-representational account, transformative, differential power cannot sensibly remain a negative category with respect to its 'other' – whether cultural or social – but must be positively defined to avoid being a merely, nominative distinction. This chapter will show that this means, in Evans' terms, to be *made explicit*. In chapter four I will examine in more detail the nature of critical autonomy with respect to Peter Eisenman's notion of the architectural diagram, where I discuss this distinction in terms of specific differences between Gilles Deleuze and Jacques Derrida. In the following section the idea that there is absolutely no critical potential in architecture, whether it be social or cultural, is briefly examined through Somol and Whiting's exemplar of Rem Koolhaas. In chapter three I examine in more detail the nature of the distinction of architectural knowledge which is enabled by the use of diagrams in the work of Koolhaas.

In a 2002 issue of *Perspecta*, planned as a contemporary response to Hays' 1974 paper, Diane Ghirardo feels she has to reiterate her scathing critique of all species of critical derived from 'the false tradition' of Rowe, Eisenman and Hays (Ghirardo 2002: 38-47) and it is no coincidence that this is also the location for the introduction of the 'post-critical' position of Somol and Whiting, identified by Rendell as a second focal point of the contemporary discussion of the 'Critical' in architecture (Somol and Whiting 2002). In this paper, Somol and Whiting argue that whilst the Critical used to be an exceptional kind of practice, for those following Hays it has become the everyday concept of architecture – quoting the editors of the journal who state that 'Architecture stands in the critical position of being between a cultural product and a discrete autonomous discipline' (Somol and Whiting 2002: 73). Somol and Whiting use this statement to mark out their enemy as a notion of criticality based on dualist dialectics that has resulted in a situation where 'all architecture now automatically occupies a de facto critical status' (73). They argue that the power of the discipline has become

reduced through concentrating on oppositional, dialectical positions rather than the instrumentality of performance and practice (75).

In Somol and Whiting's reading, the dialectical couples responsible for the ineffectual oppositional nature of the contemporary critical are: culture and form from Hays – literal and phenomenal from Colin Rowe – and capitalist development *or*<sup>47</sup> design from Manfredo Tafuri. Consequently, Somol and Whiting characterise their understanding of the traditional Critical position as having two divergent but different heritages, with Tafuri *and* Hays on one side and Colin Rowe and Peter Eisenman on the other. Somol and Whiting skip over apparently irreconcilable oppositions between Hays and Eisenman, and Manfredo Tafuri – some of which I have outlined above – and ultimately argue that there is little difference between any of these theorists involved in the Critical discussion because they are all driven by a dialectical methodology. This simplification suits Somol and Whiting's argument as they are then able to present Eisenman and Koolhaas as two poles of a new debate called 'Critical'/'post-critical' – terms clearly intended to be related (by the nature of their references) to what is described in this document as 'representational'/'non-representational'. Somol and Whiting promote a new 'projective' model, which they describe using examples of the work of Rem Koolhaas and the theories of Michel Foucault and Gilles Deleuze. This new opposition places Koolhaas at the head of a theoretical hierarchy based on 'cool' performance in contrast to Eisenman's 'hot' representation (Somol and Whiting 2002: 76).

Somol and Whiting explain their notion of a new instrumental and projective architecture by contrasting the 'indexical' approach of Eisenman with the 'diagrammatic' nature of Rem Koolhaas. The post-critical, diagrammatic method of operation is differentiated from Eisenman's use of diagrams labelled 'semiotic and representational' through the example of Eisenman's discussion of Le Corbusier's drawing of the Dom-ino. For his part, however,

Eisenman says he sees his diagramming as 'critical' because it does something more than simply describe 'the presence of elements which are merely necessary conditions' (Eisenman 2004: 120), which echoes Hays' argument for the critical architectural moment as one produced between the architect and the cultural or disciplinary habits the architect must transcend in order to innovate.

By contrast, Somol and Whiting argue that Koolhaas's section through the downtown athletic club taken from his work Delirious New York (1994) is a diagram in the same sense as meant by Deleuze, and that the architectural object Koolhaas considers is not one concerned with itself or the effect that its form has, nor even how it is arrived at, but what it *does* in terms of how it 'contributes to the production and projection of new forms of collectivity' (Somol and Whiting 2002: 75). Somol and Whiting's reading of the Koolhaas diagram is that it does not merely construct a discourse within the discipline but goes beyond it. They argue that the Manhattan downtown athletic club section comments on the social condition of the tower block and therefore composes social conditions rather than a reading of structural elements – it operates beyond the discipline in the social realm.

Somol and Whiting's claim is based on the understanding that Deleuze argues that a diagram is 'the imposition of a particular form of conduct on a particular multiplicity' (Deleuze quoted from Foucault in Somol and Whiting 2002: 75). However, it is important to note that Deleuze has a clear purpose in this evocation of the properties of the diagram of Foucault: this kind of diagram is a real and concrete process of imposition of a *particular* conduct on a *particular* body, and the relationship between a theoretical concept and the practical implications it has must be established before this 'diagrammatic' nomenclature can become operative as a real distinction (Deleuze 1988: 34-39). Consequently, the validity of Somol and Whiting's

theoretical claims are highly contested with respect to the actual 'diagrammatic performance' of Rem Koolhaas and OMA.

However, there unfortunately appears to be a strong basis for Somol and Whiting's assertion that the notion of the Critical has been flattened and made ubiquitous. For example, at the same time that Rendell raises considerable concern regarding Eisenman's own definition of the role of the 'social and cultural in architectural practice' (Rendell et al 2007: 3), Eisenman also feels able to argue that Somol makes the mistake of presuming 'architecture already contains in its being (i.e. its interiority) the condition of the social'. While Eisenman's own motives are very much under scrutiny he remains able to question the opposite pole of the debate on the same point - arguing that Somol simply 'takes it as axiomatic' that 'architecture both as a discipline and a social project needs to suspend and rearrange ruling oppositions and hierarchies' and assumes that all 'designs [...] must rather *transform* their very social and intellectual contexts' (Eisenman 1999: 30). Whilst they might be attempting the opposite, Somol and Whiting are greatly implicated in this process of flattening since the new 'post-critical' opposition they posit has to be seen in terms of very close disciplinary relationships with *both* Koolhaas and Eisenman.

The closeness of theorists and architects that mutually celebrate one another [...] leaves no space for debate [and] is complicit with the commodification of capitalist hegemony Tafuri explicitly criticised – and against which most of these theorists have repeatedly railed'

(Ghirardo 2002: 38)

Ghirardo for example, sees nepotistic disciplinary relationships as central to the creation of an exclusive culture focused on commercial gain, relegating theoretical principles and arguments to the role of (mostly internal)

advertising (see also Stevens 1998). In reference to these mutually reinforcing 'critical' relationships, Heynen argues that Somol and Whiting's notion of the 'post-critical' is little more than an Oedipal rebellion and 'simply a disguise for the old idea of 'Critical architecture', implying that whilst they might have understood the nature of the Critical in architecture (and that this might have commonalities with a Deleuzian philosophical account) they have chosen to present it in a manner aiming to promote their own (post) Critical position within architectural theory (Heynen 2007: 52). Consequently it is readily possible to separately contest Somol and Whiting's theoretical accounts of practice and the actual aims and behaviours of those practices.

For example, Koolhaas himself argues that 'most of what we do at OMA should be understood as absolutely undermining this notion of autonomy, and asserting that architecture, by its very nature cannot be critical' implying that whatever theoretical approach Somol and Whiting are describing it does not have a simple and direct relationship to Koolhaas's actual practice (Koolhaas 2009: 35). This is further complicated when Koolhaas apparently contradicts himself to argue that OMA makes extensive use of irony to produce a critical affect in wider society. It might therefore be assumed that a disavowal of the 'post-critical' label might itself be part of the implied, passive 'inversion' intended by his use of 'propaganda as a kind of ironic criticality' – which he argues covers at least 70 per cent of his work (Koolhaas 2009: 35-47).

Many commentators at least agree with Koolhaas that he is undermining the notion of the Critical – finding the *instrumentality* of his performance of irony difficult to detect in projects with governments sanctioned for their human rights records, headquarters for commercial fashion companies and villas for super-rich clients. That is to say, when these 'post-critical' practices are placed against some of the 'diagrammatic' social claims made for his architecture, it can certainly make Koolhaas appear to fit Murray Fraser's



depiction of him as 'a fifth columnist' who implicitly and deliberately undermines others' social aims for architecture (Fraser 2007: 333). However, others argue (e.g. Baird 2004) that at times Koolhaas has taken many properly Critical stances, and Koolhaas himself refers with great pride to certain subversive projects - for example, one for a new European flag (Koolhaas 2009: 47).

Given the strongly held and obviously divergent positions around the work of Koolhaas and Eisenman, I shall examine in more detail, with respect to the use of Deleuzian diagrams in architecture, the operation of their practices in the two following chapters. Now, I shall very briefly further investigate the alternative, 'third strand' of contemporary Critical theorists who find both of the prominent accounts investigated above inadequate for describing the role of architecture's creative practices in both social production and the social production of architectural practices.

## The Critical project of architecture

Rendell notes that the post-critical interest in 'moving architecture from discipline to practice or performance' is received as a positive contribution by many commentators and suggests a productive direction for investigation through the potential of Deleuze for 'producing new encounters', noting the embodied inter-personal nature of Deleuze's concept (Rendell et al 2007: 3). Rendell herself offers a distinction between *multi*-disciplinarity and *inter*-disciplinarity as a way of understanding the nature of a more embodied or performed approach. Instead of the presupposition of a closed identifiable body or discipline, *inter*-disciplinarity produces new 'subjects' through collaboration with other bodies, a complex notion of subject as articulated by, for example, Julia Kristeva, a key reference for her (Rendell 2004: 146). This consideration of the relationships of production of the subject of the architect – as well as the subject of architecture – are identified by Rendell as

the location of disciplinary anxiety. In so doing she at once suggests a diagnosis for the problem between the (small c) critical Hays and the (big C) Critical Tafuri as one of disciplinary protectionism, whilst also promoting an embodied approach to the social distinction of the discipline of architecture. Rendell argues that an embodied understanding of the nature of a Critical autonomy might assist in the production of a positive definition through reference to Rawes' 'embodied' reading of Kant<sup>48</sup> (Rawes 2008).

Therefore, whilst the cultural expression of the theoretical production of Koolhaas might well serve to articulate his commercial expertise to an audience of elite clients, the content of the theoretical position of Somol and Whiting, referring as they do to Deleuze, is recognised by Heynen (for example) as a key contribution to a continuing project to pursue a post-structuralist theoretical position striving against essentialism – even whilst the person they describe as embodying this position blankly denies it (Heynen 2007: 50). Heynen argues that we should move to a positive conception of a renewed rather than 'post' Critical position in terms of 'embodying a project', since for her this term refers 'to the act of imagining an alternative to the constrictive and discriminatory spaces of the present, and then enacting this vision in all its materiality' (Rendell et al 2007: 51). The next section explores how Evans and Deleuze can contribute to an embodied and critical understanding of architectural production moving from a non-representational critique of dualist epistemologies in architecture towards an embodied 'projective' understanding of the relationship between architectural processes and products.

## 2 Theory in pictures

### The picture illusion

The picture theory has been difficult to see through because pictures can stand for a large part of vision very convincingly [...] if we are finally able to define its limitations and excesses, that is only because the shared knowledge of pictures made a substantial theory of vision possible in the first place [...] imagination and perception are shown as pictures, because that is how they are normally described. They are not pictures, but the very fact that they are thought of in that way is very significant.

(Evans 1995: 358, 370)

In Evans' posthumous work, The Projective Cast, he aims to test the proposition that 'Architecture is more than the sum of its representations' (Evans 1995: ix). Whilst his final book might be 'lacking a parting shot', as he noted before his untimely death (xxi), the conclusions he forms are intensely evidenced in the preceding portions. Through a series of detailed case studies, he makes a very strong argument that architecture's creative processes cannot be adequately accounted for using traditional approaches, which he calls 'picture theory'. Picture theory is defined as a way of thinking of the process of drawing and designing that understands imagination and perception as simple, objective, representations using the analogy of 'translation'.

According to Evans, 'the translation analogy' has come to be the most common mechanism for understanding the relationship between drawings and buildings in the architectural process, both amongst the general public and architects themselves. Evans describes 'the translation analogy' as being

taken from mathematics, where it has precise meaning as a device that conveys a mathematical object across space without changing its form.<sup>49</sup> However, when the term translation<sup>50</sup> is used in reference to language it is generally assumed to be a merely convenient description of what is also, in itself, considered to be a specialist art. Whilst assuming that linguistic translation is an entirely determined process offers a useful simplification for the purposes of discourse, it does not resolve the practical difficulties of communicating simple meanings in different linguistic contexts. When the translation analogy is used to explain the creation of architectural drawings and the process of architectural construction, Evans questions how it could be that the relationship between buildings and their drawings is understood as a simpler system of codification than language, because he considers them to be much more complex processes and relations.

[...]the assumption (of the translation analogy) that there is a *uniform space through which meaning might glide* is *more than a naive delusion* [...]. Only by assuming its *pure and unconditional existence* in the first place can any precise knowledge of the pattern of *deviations from this imaginary condition* be gained. [...] something similar occurs in architecture between the drawing and building.

(Evans 1997: 153 emphasis added)

Evans' analysis of the operation of the translation analogy in architecture identifies four key features: first '*a uniform space through which meaning might glide*'; second, an assumption of its '*pure and unconditional existence*'; third, that this is more than just a '*naive delusion*' and fourth, that the process functions through a comparison of '*deviations from this imaginary condition*'. In the following passages I will show that each of these four features are identified in Deleuze's critique of representational thought and that Evans is very astutely describing the operation of a representational

epistemology in architecture through the conceptual device of the translation analogy.

Deleuze begins his project for a positive alternative to dualist epistemologies in Difference and Repetition by wondering what 'thought without image' could be, claiming such thought would enable a thinking of *difference* (difference-in-itself) and a full understanding of time (repetition-in-itself). He argues that together these concepts are essential for understanding change and therefore creativity – in terms of how the new is brought into being as 'genuine universal' and 'true singular' (for example, Deleuze 1994: 303). In Difference and Repetition, Deleuze performs a detailed critique of the epistemology of René Descartes (1596–1650) in order to set out the specific inadequacies of representational thought and to begin to construct his non-representational alternative (Deleuze 1994: especially chapter three). In this analysis Deleuze identifies four representational illusions which restrict conceptions of both difference and repetition and which result from what he describes as the presumption of a morally defined, universal 'Cartesian' thinking subject.

[...] it cannot be regarded as a fact that thinking is a natural exercise of a faculty[...]. 'Everybody' knows very well that in fact men think rarely, and more often under the impulse of a shock than in the excitement of a taste for thinking.

(Deleuze 1994: 132)<sup>51</sup>

Descartes describes his methodology as beginning by placing his 'own self' at the centre of the judgement of truth, claiming that this is how to avoid presuppositions. Deleuze agrees that Descartes begins his project in good faith, attempting to eliminate all presuppositions by beginning his philosophy with his famous phrase, '*I think therefore I am*' (129),<sup>52</sup> which for

him must literally be the first thought in an ordered analysis of reality (see Part 1, article 7 Principles of Philosophy (1984)). This is Descartes' route to pursuing truth – a truth that he finds present when there is no longer possibility of doubt (Deleuze 1994: 129).<sup>53</sup> However, Deleuze argues that this is a notion of a *pure self* that simply refers all presuppositions back to itself in the form of opinion. The yardstick of truth here is the self thought of as universal (129). By attributing to his 'I' the abilities of thought and judgement, Descartes' self must be one worthy of judging existence (and not merely the existence of itself), as well as one that is definitively *thinking* (in the literal sense that it has been forced to think through an encounter outside of itself (139).

[...] 'it is of course the same wax which I see, I touch, which I picture in my imagination, in short, the same wax I thought it to be from the start' [...] All his faculties are in agreement as to the similarity or identity of the wax, his senses are in common agreement. [...] common sense (of the faculties of the individual) is what occurs in the process of identification and nothing is sought from the senses but confirmation [...] any difference of opinions have to be good naturedly ignored or avoided, or reduced to factors about which agreement can be reached – a reduction which amounts to a deliberate and systematic eradication of difference.

(Deleuze 1994: 133)

Deleuze argues that Descartes takes the typical presumption of common sense and good sense and makes them philosophical to avoid the fact that they are subjective presuppositions made universal (129–131). The underlying presumption of the universality of the subject is of an ultimate, unvarying, clear and distinct truth to which methodical, individual thought may give access. However, this is thought raised to the level of a principle that enables the judgements made by the self to be neutral in relation to

*universal* truth. The principle upon which this notion of truth rests is the principle of recognition: there is only one truth, the one recognised or confirmed by all *good* common sense(s). The presupposition of recognition says: 'there is a natural capacity for thought endowed with a talent for truth or an affinity with the true, under the double aspect of a *good will on the part of the thinker* and an *upright nature on the part of thought*' (131).

Good sense is the underlying good will of thought that good naturedly ignores differences (patterns of deviation which are not recognised) and the ultimate position of common sense and good sense is that it is simply not a possibility that *truth* could be disputed or produced (131). Here, good sense becomes an institution designed to deny its social construction, because if there is only a single truth then what is disputed is merely access to it, rather than the fundamental power to assert what it is to be truthful. Deleuze argues, therefore, that in representation, differences are understood as errors and are subject to eradication, based on a judgement against an external, transcendent, *universal* field of good sense (xvi). Differences are suppressed because the mechanism by which the good sense operates (by which it is able to have the faculties come to agreement) is through the primary principle or model of recognition – identity based on what is common to the senses (the senses of the individual and the senses of the people) (133). When Evans argues that the picture theory operates according to the concept of translation – which assumes '*a uniform space across which meaning may glide*' and belief in its '*pure and unconditional existence*' – his universal plane of meaning appears to describe the universal subject in which Descartes' *common sense* is made. Similarly, the requirement for an unconditional belief in the universal nature of the common subject is the very substance of *the good sense* described by Deleuze.

In Deleuze's reading of Descartes, the universal subject is a thinking subject that presumes that knowledge is synonymous with thought and that the body is a mere tool or extension of the mind – just one of the objects which the mind is able to clearly discern. The body is the subject of the mind's discernment, thought occurs as a principal category, and consequently the body is not implicated in thought but considered part of objective 'space' that consists of clear and distinct objects discerned from one another against a transcendent, universal field. This universal, objective space or field presupposes a world without a body immanent to it, and the sense that a body makes of the world is therefore removed in favour of an intellectual comparison of representations through the principle of identity or the recognition or common agreement of the faculties. Deleuze claims that each of the faculties operates according to the principle of identity or recognition, but this principle or mechanism by which a commonality of the senses may be arrived at operates on a progressively more complex or convoluted basis. Whilst the common sense and the good will are the final moral arbiters of the processes of agreement of the faculties, the faculties each have their action limited and characterised by these presumptions or illusions (264-269).

Deleuze argues that for each of Descartes' four faculties – of conception, perception, judgement and imagination – the presumption of a universal subject produces a different form of this illusory identity relation (138). Evans raises the presence of these illusions of representation in architecture in terms of the advantage they confer – arguing that they are 'enabling fictions' which serve to maintain the dualism whilst they remain implicit (Evans 1997: 154). In Deleuze's account of Descartes' faculties, these enabling fictions begin with intellectual coincidence (the Same / conceived identical), then deal with different instances of the same (the Similar / perceived to be the same), moving on to account for what is *essentially* similar (the Analogous / judged to be of the same kind) and finally



accounting for what is different from the same (the Dialectic / imagined to be in opposition). In architecture, these four categories may also be related to an increasing complexity of relation between drawn image and projected object, or between imagined object and drawn expression of that object.

In the first illusion Deleuze outlines – '*conceived identity*' – the thinker has a good will and thought is good-natured up to an appropriate standard, neither exceptionally clever nor exceptionally evil or stupid (they cannot have an ill will) (Deleuze 1994: 130). In this common denominator of sense, for the faculties to concord, they need the complementary concordance of perception of the subject – good sense. There has to be an agreement about what is *good* for all to agree – for it to be *common*. This means that what is acceptably conceivable may only be found in what is commonly identifiable. The presumption of agreement between faculties operates according to a principle of recognition between the intellectual conception and the physical perception of the object. This artificially separates the process of thinking from the other faculties, which are assumed to all operate *within* thought. Consequently, the second illusion – '*perceived similitude*' – occurs because the faculties are seen to be merely further specifications of the general presupposition of a universal subject: 'I think' is specified by 'I conceive', 'I perceive', 'I judge' and 'I imagine' (138). In the third illusion – '*judged analogy*' – the universal thinking subject that is able to say confidently '*I am*' is only part of a proposition and still indeterminate: it needs other determinate concepts to fulfil its principle of identity – *I am* (what?). Here the presupposition of good will and common sense therefore also presuppose categories of being (humans, mammals, canines). Membership to a category enables the institution of a hierarchy and difference becomes merely a judgement amongst competing claims (I am a mammal, a human – not a dog!) and consequently being may only be understood as an *analogue* to that which is already assumed and cannot be questioned without undermining the whole system.

The fourth illusion – *imagined opposition* – is the logical elaboration of the extended process of judgement against representations, and Deleuze argues that whilst this process forms the philosophical method of 'the Dialectic', dialectical arguments based on a dualist epistemology will always be produced through disproving identity relations and can therefore never act in affirmation of difference. For Deleuze, the dualist Dialectic operates according to the principle of recognition and therefore understands difference only in negative terms – 'error expresses everything that can go wrong *in* thought, but only as the product of *external* mechanisms' (167, emphasis added). In this schema, any proposition is tested against its negative – through a process of opposition of contrary predicates or limitation of primary predicates.<sup>54</sup> Difference here is only the differential remainder after a test of resemblance is applied to determine the subject of error. Whatever is different is wrong in comparison to what is previously assigned right (is it a dog? No – it is the wrong colour and its ears are in the wrong place).

In Deleuze's account of Descartes representational thought is characterised as acting through the moral disciplining of a 'good will' and the implicit universal agreement of the 'common sense', ensuring that difference is subordinated to simple recognition, degrees of resemblance, analogous models or the negative. These four different ways of specifying commonality between different embodied instances of sense making are each subtly contextual facilities of resemblance that suppress differences. In the next section I examine how these illusions of representation are exemplified in Evans' critique of accounts of architectural practices as the 'translation analogy' and use Evan's analysis to explore how they tend to operate within those disciplinary practices.

## Species of illusion

In Palladio's sketch of the S.Petrionio façade the close alignment (but not quite identity) between drawing and building is at once obvious [...] a massive, monumental architecture engendered from the etiolated, reduced, bodiless elements of '*lines and angles which comprise the face of the building*' [...] an architecture made through drawing and made of the same species of illusion to be found in the drawing [...] the pursuit of this particular illusion has retarded architectural vision by keeping it restricted within the confines of particular conventions (which are in fact) responsible for establishing the drawing as a viable medium, allowing the architect to spill his imagination onto it, sure in the knowledge that much of the effect would travel [...] if its advantage was the ease of translation, its disadvantage stemmed from the same source: too close a likeness, too cautious a liaison, too bound up in the elaboration of formalities [...]. It may seem obvious that only when fighting this tendency, seeing outside the drawing technique, his imagination soaring above the confines of the medium, can the architect create fully embodied three-dimensional forces [...] it is also demonstrably false.

(Evans 1997: 169)

Evans argues that the advantages of easy translations have ensured the architect's complicity in two 'demonstrably false' assertions or illusions operating in architecture. The first assumes that there is a direct correlation between idea and thing, the second that the individual imagination is the site of creativity. The first, demonstrably false assertion willingly and unquestioningly assumes that a process of translation is gliding across the universal plane of meaning. In assuming a universal subject or common sense it requires complicity with this framework of identification, which must be established as predominant for it to be sensible – it must be a good sense to have for it to be good common sense. Evans' second illusion, by virtue of

constructing this transcendent dimension or universal plane, is therefore required to assume that this intellectual space will always far exceed what has actually been translated within it, otherwise what is 'good' is too obviously subjective and partisan and no basis for sensible judgement.

Evans argues that once the drawing is assumed to operate according to such a principle of identity or recognition – *close alignment* – the differences that in fact constitute its mechanism are only seen as error or lack. The differential processes which are the source of both the drawing and the architect's power must be conveniently ignored through a continual insistence on judgements of identity, because shameful errors are best kept quiet about – or used as evidence of the poor comparison between reality and the possibilities of genius, which then further stokes the cycle of delusion. Holding creativity as existing in such a universal dimension implies a transcendent creator, which is both a difficult title to live up to and only serves to make the effect of its assignment more self-laudatory. This situation creates two serious and intertwined problems for the account of creative processes. Complicity with these illusions serves to inflate the author's importance and simultaneously undermine the creative powers at the distributed heart of the process (the differential affective relations between the composed bodies).

such an enabling fiction [...] has not been [made explicit] in architecture [and] because of this inexplicitness [...] on the one hand, the drawing might be vastly overvalued, on the other, the properties of drawing – its particular powers in relation to its putative subject, the building, are hardly recognised at all.

(Evans 1997: 154)

Evans calls the 'naive delusions' of representation 'enabling fictions' because they require a moral and relatively subconscious complicity on the part of

each individual thinker in order to function – and this complicity is rewarded by conference of necessary advantage. These fictions, then, may on the one hand enable the profession to offer a determined and quantifiable service through a deliberate overstatement of the drawn object's ability to determine the built object, but on the other hand they greatly limit the embodied understanding of the creative relation between the drawn object and its subjects.

Deleuze notes that representational epistemology readily assists this delusional behaviour by being flexible enough to recognise a 'nobility' in the indeterminate processes of experimentation and learning. However, he argues that this ultimately takes the form of an homage to the 'empirical conditions of knowledge' whose traces of indistinctness or complexity are seen only as 'preparatory movements' and all are expected to 'disappear in the result' (Deleuze 1994: 166). The complexities of the creative moments in the design process are generously tolerated but only briefly and only until it meets its ultimate expectation to deliver a precise translation between drawn conception and physical construction. The differences between the drawing and the subject of its translation or between the imagination and the drawings it produces are then 'good naturedly ignored' by the common sense of the faculties, to either justify the exchangeable professionalism of the drawing or the elite expertise of the designer.

The dualism is seen to either limit the capabilities of the drawing and its product through the expectation that there is a causal relationship between one and the other, or to limit the capabilities of the drawing and its producer through the presumption that the process of identification is a purely inherent or internal one. The first posits a notion of the drawing as a pure appearance, ultimately relegating all creative inter-relational aspects of the process. The second prioritises the creative process but makes it into an essence of expertise, in this case relegating the actual mechanisms of

transmission of cause – which produce the built form – to the realm of 'intelligible essence'. The functioning of the representational system of thought requires the institution of a common sense, and men of good sense to found it. The deliberate (it is obviously inadequate) and malign (it is implicit) moralism (it requires complicit agreement in external judgements) at the heart of representational thinking is, in some ways, an unfortunate side-effect of its efficacy.

## Recognising distinctions

Recognition of the drawing's power as a medium turns out, unexpectedly, to be recognition of the drawing's distinctness from and unlikeness to the thing represented, rather than its likeness to it, which is neither as paradoxical or dis-associative as it may seem.

(Evans 1997: 154)

From the preceding discussion we can see that both Deleuze and Evans argue that it is not enough to ameliorate the insufficiencies or excesses of representational thought (overvaluing the power of the drawing to determine and undervaluing the power of the drawing to create). They both argue that the dualist repression of embodied and creative relations must be fundamentally addressed if we are to escape the interminable form/function-aesthetics/ethics see-saw and explicitly discuss the creative potential of processes of design, and life.

Evans' epistemological project is to properly account for the limited powers that the drawing has in processes of determination, and at the same time fully recognise the understated powers it has in terms of creative production. Whilst Evans finds the drawing overvalued in terms of its ability to have a determinate or causal relation to its object, he also argues that the

drawing has a power that remains unrecognised, a power that he locates in its distinctness and unlikeness to the thing it is used to 'represent'. A Deleuzian epistemology finds Evans' argument for a prioritisation of dissimilarity in an epistemology of architectural drawing neither paradoxical nor dis-associative, since Evans may be taken to be both articulating the inadequacies of a representational dualism and also identifying the positive – 'affective' potential in the 'transitions between objects' (Evans 1995: 367).

Deleuze argues that whilst the illusions of representation see difference as being a terrible lack (of similarity necessary for a perfect translation), creating and enforced by the fear of non-sense, it is instead the paradox of inherent dissimilarity in 'transitional' relationships of affect that brings potentialities into existence and would, therefore, give drawing and design its creative force. Likewise, Evans does not believe that the drawing is a code of similarity or analogy allowing translations between universal surfaces of representation; rather he insists that the drawing 'always interacts with what it represents' (Evans 1997: 199). Here, Evans argues that drawings are in fact powerful determinates of forms, not through the representations they identify and fix, but through the indeterminate trajectories that they open with their creators and operators. I will now show that the relationship of non-identity or dissimilarity between imagination and perception in Evans 'projective' account is directly concordant with Deleuze's critique of representational thought and bares comparison with the notion of non-representational thought as 'Affect'.

### 3 The affect of projections

#### The projects of architecture

My purpose here is to show how projection [...] breaches the boundary between world and self, the objective and the subjective [...]. Imagination and visual perception are shown as pictures. They are not pictures, but the fact that they both are thought of in that way is very significant [...]. Where though is the imagination? If it is not in the mind's picture gallery does it cease to exist? [...]. Imagination is not held within the mind, but is potentially active in all the areas of transition from persons to objects or pictures. It operates, in other words, in the same zones as projection and its metaphors.

(Evans 1995: 365-66)

Evans identifies ten transitive relationships of projection, which problematize the representational assumptions of 'picture theory'. Evans' ten projective relationships are identified as operating between objects and drawings and viewers. He marks all the moments in a design process which might be described using the concept of 'translation' but which he argues must involve a process of projection, because each requires a creative – imaginative – act to 'fill the gap' (363) between a partially adequate, objective codification of 'abstract mathematics' and a partially adequate, subjective process of de-codification of 'palpable experience' (366).

Evans describes the ten relationships in the final pages of The Projective Cast as follows. In the first case, of '*two dimensional graphic projection*', the third dimension is imaginary in the drawing and this correlates in different ways to several orthographic images. For Evans this is an example of a projective relationship *within* a drawing, which much of Evans' historical analysis



discusses in terms of how different drawing techniques involve different forms of projection (see Evans 1995: chapters three and four).

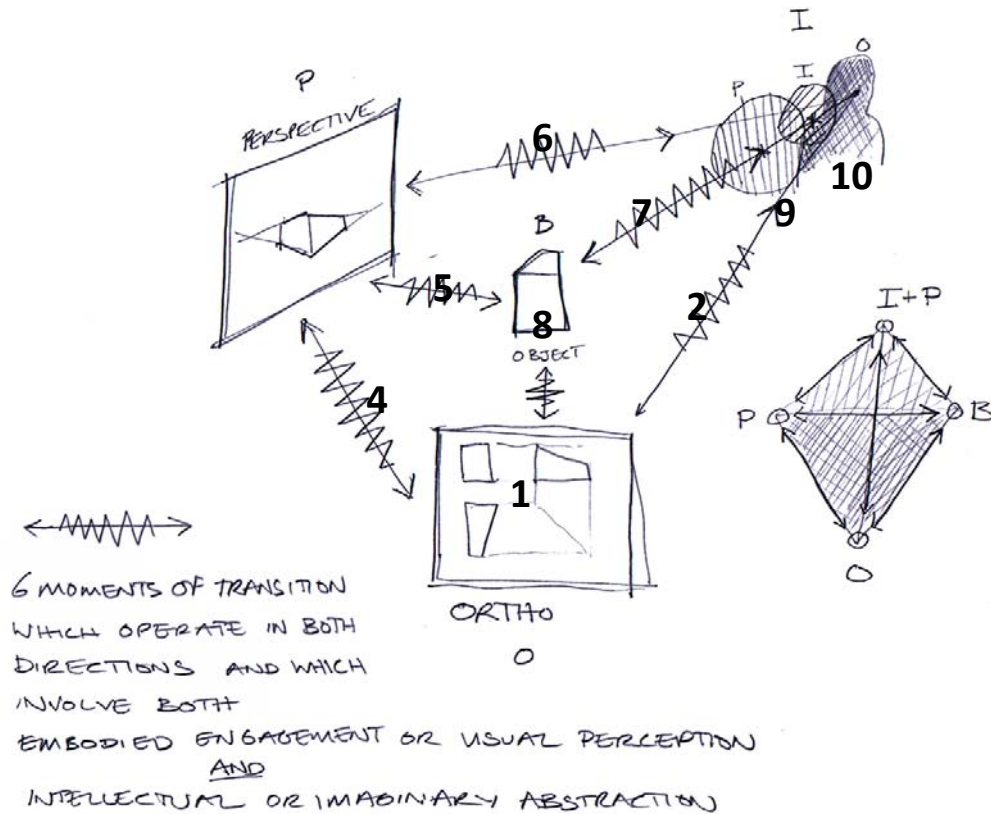


Figure 7\_  
Diagram showing Evans' diagram of projective relationships  
(drawn by the author)

In the second case, 'Three dimensional perspectival space' is seen as an 'optical route between a mobile observer and an orthographic design'. Evans argues that whilst in the direction 'drawing → observer' this is a relatively simple process of codification, the other direction, producing an orthographic projection of a perspectival space is 'inextricably bound with mobility and imagination' because it involves a projective relationship between the formal image and the mental image – clearly therefore implicating projection as an embodied condition. The third case is 'non-projective space between orthographic design and the designed object'.

Whilst Evans recognises that scaled measurements and processes of fabrication mean that no projection appears to be involved in this, he claims that the projection process 'inheres in the orthograph' – once again implicating embodiment. In the fourth case, '*Graphic projection between orthographic design drawings and perspectives*', Evans categorises the relationship between a formal image of one kind and a formal image of another (365-367).

The fifth case, '*Three dimensional perspectival space between the object and the derived photographs and images made on site*' articulates the relationship between a formal object and a formal image. The sixth case records the '*Three dimensional perspectival space between derived pictures and perceiving subject*'. Case seven is '*Three dimensional perspectival space between an object and a mobile observer*'. Evans finds this relationship one of most interesting and notes that whilst it seems sensible to argue that the building is projected towards the observer, if relationships of projection are always two-way, he asks, what might be projected towards the building? This question is the most explicit posing of the role of the bodies of the creators and operators in the production of projective relations.

Cases nine and ten are '*Imagination and visual perception*' and are depicted as representations. They are drawn in this manner by Evans to articulate how 'picture theory' thinks of them rather than to suggest that this is how they actually operate. Evans argues that the traditional, inadequate account of all of these projective moments in the design process each contain the essential assumption of representational (picture) thought – that a mental image held in the retina or the brain is of the same nature as a formal image held on paper, and conversely that these are of the same nature as the image of reality perceived by the eye or the camera. Each of these ten points characterise moments when the translation analogy and these relationships of identity are normally operative (365-367). Case eight is of '*Imaginary*

*space produced within the object*'. Evans argues that this is an affect of depth perception that does not 'actually' exist – for example a *trompe l'oeil* – and suggests that this is in fact an example of case seven (365-367), strengthening the interpretation of his analysis as presenting a notion of projection as a two-way relation between observer and object that must be an embodied condition of variation or creation.

Evans' diagram makes explicit relationships in the architectural process which tend to be described as translative, and in so doing it makes these projective relationships into constituents of the process. This mode of analysis, therefore, sees buildings, drawings and architects as bodies which are both constituted by the relations in which they are situated and determinants of those situations. Through making the separation between imagination and the perception explicit, it posits an architect as having attributes of both embodied engagement and intellectual abstraction that may be simultaneously and independently expressed. Consequently, each of the eight moments outside of imagination or perception can be described either in relation to the imagination (10) or the perception (9). In traditional epistemologies where these projective relationships are not made the explicit subject of analysis, the different emphases these perspectives produce may be seen to result in the dual, divergent explanations of these relationships – as either artistic genius or professional codification.

Instead, Evans' studies of the processes and products of architects such as Palladio or Philibert De l'Orme<sup>55</sup> analyse the potential causal relations which can be produced between an object, its representations and their observers (Evans 1997: 173). Alongside a philosophical impetus to address the character of the underlying epistemology of architectural theory, Evans builds a strategic view of the relationships between drawing, design and construction processes in order to delineate a more adequate alternative to translation that does not see an identity relation between imagination and

perception but rather prioritises the projective – differential – nature of this relationship. He picks out moments in the processes of translation between drawings and their buildings where the analogies of representation no longer hold and where the importance of the concrete interactions between the architect and the design objects are irrefutable; it is these relationships he labels 'projective'.

It would be as crude to insist upon the architect's unfettered imagination as the true source of forms, as it would to portray the drawing technique alone as the fount of formal invention. The point is that the imagination and the technique worked well together, the one enlarging the other, and that the forms in question [...] could not have arisen other than through projection. A study of De l'Orme's use of parallel projection shows drawing expanding beyond the reach of the unaided imagination.

(Evans 1997: 180)

Evans' processes of projection occur neither purely in the architect's intellect or imagination nor outside of all experience. Evans argues instead that the drawing, the technique and the imagination must be working together, inspiring each other, with technique either offering a potential there was not yet a desire for (but which became apparent through speculation and experimentation of existing processes) or firing the imagination for something which was not yet achievable (driving a search for a way to express those desires). This argument involves accepting that the imagination is not a personal generator of form or ideas, with each individual genius expressing the essence of beauty, but rather a serially interactive construction of relations between drawings, between drawings and techniques, between techniques and attempts to use and understand them and between these technologies and the social contexts which desire or inhibit their development and dissemination. It is in these relationships,

which are external to but immanent (contiguous and simultaneous) with the mental representations of authorship, that the power of the imagination produces forms. These are the sites of the dissimilarities that Evans discovers, the points where the translational, representational analogies have to be dispensed with in order to achieve something more.

### Evans' expressionism

The two broadest routes from Euclidean space seem to leave in opposite directions, towards palpable experience and towards abstract mathematics. What is of interest is the way in which projection has been used as a connecting thread between these two extremes.

(Evans 1995: 365-66)

When Evans insists that the transitions between building and drawing no longer be elided by the reductive conceptual identity of 'translation', he insists on a triadic, expressionist notion of architecture. Evans locates the architect's creative power not in a transcendent, autonomous imagination but in the concrete process of production of form that occurs in the active engagement between architectural bodies. Evans' relationships of projection reconfigure the traditional representational identification that removes the intervening subject. He instead presents the situation from the perspective of an embodied subject where imagination and perception are dimensions or attributes of a – connected – two-form expressive process.

In a situation where everything is mobile, where only one thing at a time can be held down and kept still, images are the easiest items to immobilize. We should nevertheless recognise that possession of these easy captives is not a sign of victory, but a sign of fallibility. The art of composing images retains its pre-eminence largely because architecture has to be taught [...] the question is, how much more is

ever brought within the scope of the architect's vision than what can be drawn?

(Evans 1995: 365-66)

Evans argues that it is the 'mobile' transitions between states or pictures that must be understood as the key power of creative processes. It is here that he locates a notion of the imagination that is not considered identical with the idea – a notion of non-representational thinking. Evans' projective relationships do not only occur in the dynamic embodied sense of operating *between* static representations but also (simultaneously, contiguously) through the serial, iterative process of expression of the imagination between bodies in or across *time*. This, then, is an imagination not restricted to an intellectual calculation of form or to an embodied judgement of perception but one which operates instead as a engagement between the two – one that *acts* to produce or project that embodied idea into the future form.

### A diagram of architectural thought

Deleuze argues that the principle of recognition or resemblance that produces representational thought is a perception only of objects which do not 'disturb thought' – a process of selection without *thinking* that chooses objects 'because our judgement of them by sensation seems adequate', whereas objects which 'force' thought 'always invite the intellect to reflection because the sensation yields nothing which can be trusted' (Deleuze 1994: 138). He argues that it is the relationship to something outside of us that forces us to think: 'This something is an object not of recognition, but of a fundamental encounter' (139). *Thought*, in this sense, is a fundamental encounter with difference, and is a distributed and immanent location for creativity: 'To think is to create – there is no other creation – but

to create is first of all to engender *thinking* in thought' (147). The principle that thinking has to be forced in some way to consider difference and perform a creative act forms the connection between Plato's 'Simulacrum', Spinoza's 'Affectus', and Evans' concept of projection. In Evans' account, 'a thought without image' becomes the embodied sense that occurs in the transitive moment of projection – which in Spinozist terms is the mobile or dynamic moment of affect between two states of affection.

As I have shown in chapter one, Deleuze's account of Spinoza draws out three kinds of knowledge that are categorised according to different levels of embodiment in relation to time. The first is akin to simple reaction in a stimulus/response circuit and is nothing more than the present moment – it is referred to as indications or knowledge of signs. This first kind of thought does not involve an encounter with the outside and is not tested – it is inadequate. The second, however, is able to make comparisons over time – it is defined as 'knowledge of relations and their composition and decomposition' (Deleuze 2003a: 4). Spinoza calls this kind of knowledge 'Common notions' because it is able to use both positive and negative experiences to build an understanding of causes. It does involve encounters outside of habit and is adequate. However, Spinoza holds that there is also a third kind of knowledge, because he says 'relations are not essences' – which is to say that the projective relations between bodies are real, just not actual, and we can gain knowledge of the relations between them (7). The third kind of knowledge acts towards the future in an actively predictive (performative experimentation rather than intellectual speculation) – projective – capacity. It is referred to as intuition, 'compositional' or 'diagrammatic' knowledge and is knowledge of the relations between 'degrees of power' (7). This third kind of knowledge emerges from common notions that do not fall back into habitual processes or representational categories (which is referred to as 'the Civil State' by Spinoza) and is more than adequate – it is decisive or distinctive. The third kind of knowledge is

knowledge *of* and *as* power because it is an embodied active knowledge, explicit and external.

This intuitive knowledge is both produced and discovered in our actions toward the future, the projective moments in which we move from one state to another with an active intention. The knowledge we build up from our experiences of acting is made through these external encounters or affects. These encounters are with the sight, sounds, smells and beings of the world around us and include the affects of all bodies from stars to pilasters to plasterers, insofar as they have the power to affect us. This kind of knowledge can only be intuitive because we cannot absolutely predict the outcome, because the outcome is not pre-determinable; in addition its essence is not prediction or control but exploration as extension of capability. The purpose of intuition is an increase in powers, so that the individuation of the subject produced through the embodied production of knowledge in encounters with its outside is to be the most active and enduring it can possibly be. Deleuze argues that for Spinoza, the ethics of life lie in a argument of relative proportion. The joy of life lies in making the larger part of you – your subjective individuation – active and adequate, thereby reducing the importance of your physical extensive death (the decomposition of the infinite number of relations between the extensive parts of oneself) through constituting your being in the largest proportion of affective external relations as possible (18). Here our lives literally *make sense* in terms of what they achieve beyond mere habit and beyond asceticism or hermeticism.

The inclusion of sense in the account of knowledge generates the triadic and serial notion of expression because the notion of embodied sense is a recognition of the role of two simultaneous bodies in its construction – the dynamic relationships of affect between the 'subject' and the 'objects' with which it is in relation. This recognition of a reciprocal construction of subject



and object requires the acceptance of the reality and presence (albeit dynamic or mobile) of a third relational (projective) element. This third, projective element is what Deleuze argues should be understood as operating like a diagram. The key aspects of the diagram are that it is not a specific drawing but an informal process of projection into the future, which is prompted by an embodied relationship to existing conditions. These existing conditions might indeed, for an architect be a drawing called a diagram, but this is not the diagrammatic in itself. A diagram or project in the embodied sense has no form because it directs forms of content and forms of expression and is constituted by their affects. There is always both a subject and an object and a real process between them, which at once constitutes them and is produced by them – the virtual, formless relationships of affect. The diagram is intuitive knowledge of those relations that direct our actions positively into an unknowable future.

Evans' architectural examples of projective relationships show the reciprocal determination of forms through drawings and drawing techniques, and these serve to argue that there is both an architectural body as content in the expression and a body of architecture as the expression that resides in content. In both cases their power or potential is in the two-way (differential) encounter between the embodied subject and the external object. As Evans remarks, 'even in the solitude of pretended Autonomy, there is one unfailing communicant and that is the drawing' (Evans 1997: 155). This is a relationship that first produces a subject through *projecting* an exterior – enables the subject to be seen as a discrete object in relation to other objects – as an exercise of capability or form of expression of the architect, and their drawings or buildings. It is their power to affect. However, secondly and simultaneously this is a relationship that creates the subject's temporary, *selected* interior because they are the acts of that subject, making them such for that duration. This is the characteristic properties or form of content of the expression of the architect (and their

drawings or buildings). This is their power to be affected. These dimensions of the subject or body are produced through affective or projective relations that constitute thoughts-without-image: relations that have a principle, not of identity, but difference. These are relations made outside of 'the solitude of autonomy'. It is the active, productive knowledge of these non-representational relations of affect that constitute the Deleuzian diagram.

The concept of diagram, as a process of non-representational embodied thought that generates intuitive knowledges, corresponds with Evans' notion of projection and offers the possibility of constructing an epistemology for architecture that builds on Evans' analysis. Evans produces a triadic, expressionist account of architectural processes and products due to the embodied and durational nature of his concept of 'projective' relations and because of his methodology of making these relationships *explicit*. Evans' 'projective' critique offers a connecting thread between dualist tendencies, because he understands the methods of architectural production as being in external relation to *both* the body of the architect as an internal, disciplinary specific form of expression *as well as* to how these forms of expression are themselves seen as forms of content in the subsequent process of construction (of these designed forms as buildings).

Evans' method of accounting for both historical and contemporary architectural processes – through making explicit the two-way nature of the projective relations which create them – explores the concrete causal relations which produce real pragmatic affects or 'make sense' in a particular situation, rather than presuming that they are contained within categorical representations which may then be 'translated' from one neutral 'medium' to another. This is the moment of production of an architectural thought *without image* – because it is thinking that is produced beyond identification, instead understanding the imagination as a differential relationship with

perception that is forced through a necessary relation with the outside (with difference).

The key implication for Evans' project is that the political and ethical content of his account of architectural processes – that which makes it Critical – is that every formal aspect is understood as being produced not through a solipsistic autonomy, but through a fundamental encounter with the outside of the subject. Evans' insistence of an account of the relationship between drawing and architect and building in architectural processes, as a projection into the future that occurs both in an architectural body and a body of architecture, is a plausible process by which we may argue for an account of architecture that does not overvalue the author but instead insists on the serial, historical and external constitution of the architect and their discipline.

# **Part 2:**

## ***The two forms of non- representational practice***

## 3 \_Common knowing

This chapter uses the contested ownership and value of architectural knowledge in the Rotterdam Kunsthall project to investigate the nature and location of the projective relations of architectural knowledge identified in the previous chapter. The chapter examines three aspects of the theoretical and practical work of Rem Koolhaas: a project by Koolhaas to patent an architectural concept, the actual use of that concept in the design of the Kunsthall and a copyright dispute over that design brought by architect Gareth Pearce. It begins by examining the manner in which the Intellectual Property system articulates the value of architectural knowledge, explores how this reduces and controls the embodied affective dimensions of the design process to instances of representation and then, examines how the non-representational aspects of formal production are better accounted for as dual, simultaneous embodiments of diagrammatic or projective powers.

### 1 Contested distinctions

#### From intellectual properties to embodied capabilities

Rem Koolhaas has produced a number of faux<sup>56</sup> patent applications, the one shown in Figure 8 is called 'Loop-Trick' and refers to the Rotterdam Kunsthall (1992) as its 'initial application'. An earlier publication of the work of Koolhaas' practice – S, M, L, XL (1998) – describes how the design for the Rotterdam Kunsthall originated in a transformation of a 'previous design for the same site'.<sup>57</sup> Sticking with an earlier decision to pursue 'an architecture

of the box', the design team needed to find a way to interconnect an existing road running east-west, a public ramp running north-south and the entrances to the park and the building itself. In this account the new design took the form of a challenge: 'How to imagine a spiral in four squares?' (Koolhaas 1998: 431). The resolution of this question as a particular moment in the design process appears to be what the Loop-Trick patent attempts to protect as a 'Useful idea'. The publication of these patents in the magazine-style book Content (2004) does not explain the context of these applications beyond the title, 'Patent Office', and the tag line – 'The half-life of architecture's collective memory is now around 6 months. Ideas emerge, inspire and are conveniently forgotten. Here, OMA stakes its claim for eternity' (Koolhaas 2004: 73-85). Each of these applications refers to a project or projects from Koolhaas' portfolio and simplifies or exemplifies a particular move, moment or 'trick' from those projects. They are published in rough chronological order corresponding to the buildings they reference, and in two sequences. The first series ends at 1997, and the second occurs as a reprise at the end of the book in an 'Asia edition', referencing projects up to 2003 undertaken in Asia (510). Both series are headed 'universal modernisation patent' and contain additional information, written in an architectural idiom, referencing the history and theory of architecture and making declarations on the innovation protected by the patent.<sup>58</sup>

Intellectual Property in the UK and much of the world divides creative knowledge into three types – 'Distinctive identity', 'Original expression' and 'Useful idea' – which correspond to design protection, copyrights and patents (Gowers 2006). They move from protecting a right to a particular form to a pattern and then to a concept. According to the UK Intellectual Properties Office (IPO), design protection covers the outward appearance of

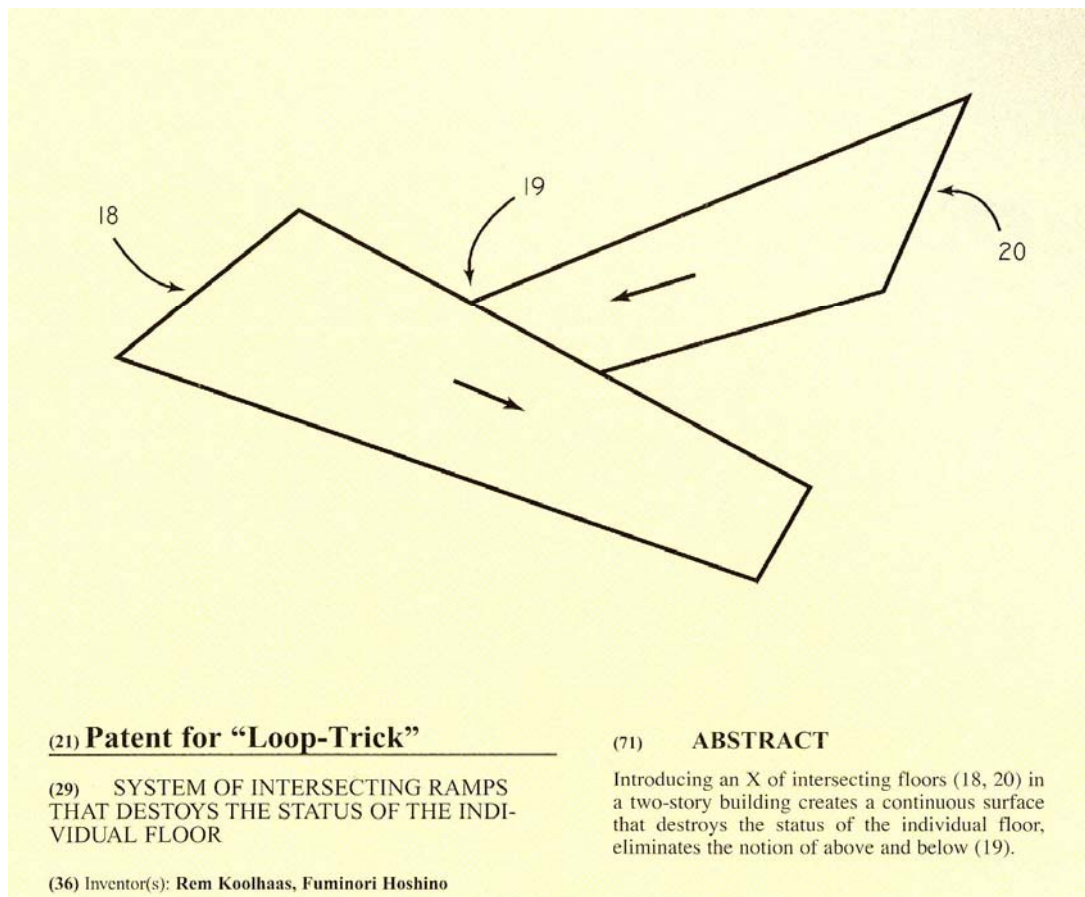


Figure 8\_  
Loop-Trick patent  
(Koolhaas 2004: 76)

a 'product', including decoration, line, contour, colour, shape, texture and material. A new shape or pattern for a product may be protected as a design – as a set of drawings or images of models. In their explanations for secondary school children, they refer to it as the 'eye appeal' (IPO). A copyright is a statutory measure giving the owner certain exclusive rights in relation to a piece of work. The ownership of a copyright is a contract which can be bought and sold and the 'owner' need not be the actual author, but is granted authorial rights by possessing the copyright. Such an 'author' has rights over every physical embodiment of their 'Original expression' through

the acknowledgement of the existence of an underlying pattern or organisation. An 'Original expression' does not refer directly to the physical result (a book) but instead to a pattern (the words forming a story). This pattern is taken to represent an ideal object 'The book' rather than a particular performance of it or a particular instance (my book, this book). The IPO describes patents as concerned with 'how things work; how they are made; or what they are made of'. Patents 'generally cover products or processes that contain new functional or technical aspects.' They stipulate that 'a new invention must contain something not obvious to an expert in the field and be able to be made [...]. In the UK it cannot be a scientific discovery or method, an artistic work, a way of performing, a computer programme, a presentation of information, a medical treatment, or immoral' (IPO 2008: 6-8). A patent is registered in the form of schematic drawings, schedules, explanatory equations, calculations and text. While the UK government defines patents as a 'Useful idea', a patent application process only judges whether a proposal is *unique* and *possible* – that is, not already covered by a previous claim and not mere nonsense (Gowers 2006: 13).

Traditionally, architectural knowledge has not been protected by patent, but by design protection and copyright, with patents the preserve of engineering and science. The Loop-Trick patent application is part of a series that ostensibly values and locates architectural knowledge in a similar way to that by which engineering innovation is protected by the actual patent process. The Koolhaas patent applications may therefore be considered ironic, because by false positive assertion they imply the questions: why can architecture not produce useful ideas? Why can architecture's knowledges not be valued like engineering knowledges? The irony that is obviously employed in the 'patent' applications is part of a wider project of Koolhaas, who claims he 'would consider maybe 70 per cent of OMA output highly



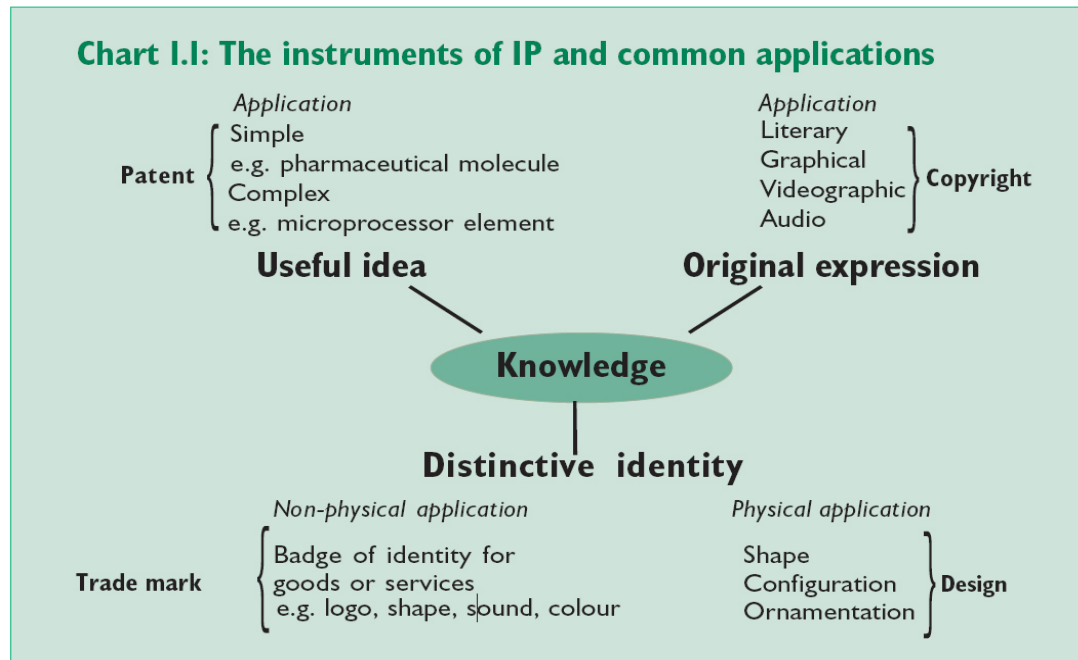


Figure 9\_  
The instruments of IP and common applications  
(Gowers 2006: 10)

ironic' with the result that 'the more our exposure increases, the more the irony is easier to miss' (Koolhaas 2009: 35).<sup>59</sup> He claims that the publications in which the patent project appears are an integral part of his architectural approach, which is greatly influenced by mass communication and journalism and which he now describes as 'propaganda as an ironic criticality' (Koolhaas and de Graft 2009: 47).<sup>60</sup> However, there is definitely no intended irony in the fact that the substance of the Loop-Trick claim is also at the centre of a design infringement and copyright dispute concerning the design of the actual Kunsthall, and in fact timings suggest<sup>61</sup> that it is this case that motivated Koolhaas' subsequent patent project as an expression of a discourse in the practice of OMA over the value and ownership of design knowledge.

The design infringement case Pearce v Koolhaas was judged against Gareth Pearce in November 2001, with the judge remarking that the claims were 'pure and preposterous fantasy' (EWHC 2001: clause 2). The Kunsthal case has subsequently been used by the Design Council as an example of how 'even strong Intellectual Property law cannot immunise a designer against spurious infringement claims'.<sup>62</sup> On the other hand, three expert witnesses – architects Frederick Hill, Michael Wilkey and Ian Salisbury – all separately concluded that copying had indeed occurred, due to a large number of graphic similarities. Pearce has yet to appeal the case, but won the right to do so and maintains a website continuing to publicise his accusations.<sup>63</sup>

[...] IP rights provide economic incentives to innovate, (but) the exclusive rights that they confer to achieve this allow monopoly prices and associated welfare losses and prevent access by other innovators. In the short run, this information is largely privatised. In the long run, information protected by IP rights falls into the public domain and enables follow-on innovation.

(Gowers 2006: 12)

Whilst there is no irony to be detected in the court's performance in the Kunsthal case, it is at least disingenuous of the Design Council to use it as an example of how the law is unable to protect designers against 'spurious' claims, because the purpose of IP law is precisely to enable a judge to make a distinction in a situation where no natural right exists. Under UK Intellectual Property (IP) law, it has been long established<sup>64</sup> that there is no natural right to ownership of what are sometimes referred to as 'intangible assets' (Kinsella 2001: 3). The right to own Intellectual Property is provided by the state for the utility of encouraging wealth production, but only for a limited period – otherwise subsequent generations would be restricted in an injurious manner. For example, a patent for the Loop-Trick (a mechanism for

removing the hierarchy between floors) would prevent any other architect from producing any kind of building that contained an intersection between two ramps in its circulation paths. With no cut-off point for 'prior art' it would be impossible to identify a contemporary invention of formal composition for which there was not some kind of historical precedent. It would therefore be either entirely unenforceable or far too restrictive a trade practice to be considered useful.

A second consequence of IP rights being pragmatic rather than natural is that they are 'rights' only insofar as they are enforceable, or worth enforcing because they *restrict others' rights* in using their *own* resources. For example, patent law prohibits me from practicing patented methods, using my own property, or from shaping my own property into a patented device, even if I *independently* invented that method or device – or in the case of US bio-patents, even if the process is something that occurs in nature and I am merely the first to codify it.<sup>65</sup> The IP system is a state-established framework used precisely for its restrictive powers – for example as one of many protectionist practices in international trade disputes (Maskus 2000: 237).<sup>66</sup> Such 'rights' are made to seem natural and reasonable through the power of the state to assert them and agree enforcement mechanisms with other states. By defining the ownership of something, it necessarily excludes others from that resource. If the resource is physical and might be removed by theft, the owner is now excluded from the benefits it provides. However, if we both have the same *idea*, I am not depriving you of using that idea, of using your capability to realise its potential. Here, the power or capability of the intangible asset is only limited by contract since we both otherwise have the means by which to realise that capability or idea. If I use the same idea as you to do something with my own property, you are only injured or limited if you have been able to previously assert ownership to that idea, method, pattern or form.

Traditional epistemological approaches make distinctions through the subjective establishment of identity relations, which then come to be understood as principles on which to recognise common agreement between senses and to establish what is good and less good sense. This kind of determination operates according to a principle of recognition, and through judgements against the Same, the Similar, the Analogous or the Opposed. The Same requires a precise repetition or determination. The Similar allows some difference but is only a slight deviation from the Same and has it as its principle. The Analogous allows for determinable relationships or axioms to take the place of a physical, material resemblance – which are more abstract but not dynamic. The Opposed begins to question these relationships through dialectical processes but, because they are predicated on the negation of difference, retains the same presuppositions of static repetition (Deleuze 1994: 138-145). Each of these judgements requires a fixed, material object or representation as their yardstick and requires the removal of dynamic relations in order to produce categorisations.

The IP system, in all three categories, in slightly different ways, seeks a determined, physical presence, or an immediate representation of it, which can be indisputably identified and owned. Here the identification of distinctness, uniqueness or usefulness is made through a production of a 'common sense' (literally, an established legal declaration of ownership) of who owns this thing, pattern or idea, *making* judgements of others' independent things, patterns or ideas as Same, Similar, Analogous or Opposed through reference to this defined representation of originality. The pragmatic restrictions placed on the use of the capabilities of intangible assets by IP are agreed both by proxy – by virtue of upholding the laws of the land, and by direct contract. For example, there is a copyright message on every DVD we buy, in order to allow the assertion in court that we have

entered into a direct contract with the producer of the 'original'. This presents the key paradox of Intellectual Property (which it attempts to resolve by reducing or removing difference) - whilst it is designed to protect intangible assets, it must always begin with what is apparent, tangible and material.

Firstly, for a 'Distinctive identity', this relationship is a simple declarative judgment of sameness. Is it the same? Yes it is! Here images or drawings, which specify the likeness, are lodged and the judgement between these models and any illegitimate copies is made on the basis of direct visual conformity. Secondly, an 'Original expression' is defined by the judgement of similarity between the original (protected) expression and how it is expressed by others, in order to prevent others from expressing anything that is too similar to the original. It protects the author's (copyright owner's) rights in preventing any expression that is similar, i.e. a copy (even if it was independently produced and is also 'original'). Here a pattern is identified, against which a test of resemblance may be applied. Third, the 'Useful idea' concept of the patent extends this notion into the realm of the analogous and the dialectical, but also commences with a principle of recognition. Here identifications are made with particular names of processes or objects, which are tested through the recognition of analogues of one another.

If I patented a flying machine the patent could equally apply to helicopters and aeroplanes even though they are completely different [...]. It seems ludicrous that a patent for one technology can cover another but patents are anything but precise and are meant to cover things that aren't yet invented.

(Probert 2002)

<b>Intellectual Property category</b>	<b>Instance of application</b>	<b>Concept of identity</b>	<b>Judgement of Intelligible essence</b>	<b>Judgement of Sensible appearance</b>
<b>Design protection</b>	Single	Form	Distinctive Same	Identity Similar
<b>Copyright</b>	Multiple	Pattern	Original Similar	Expression Analogous
<b>Patent</b>	Possible	Method	Idea Analogous	Useful Dialectical
			<b>Origin/Author</b> Form (Time) Diachronic	<b>Physical object</b> Function (Space) Synchronic

**Figure 10\_**  
**Intellectual Property categories**  
 Showing relationship between  
 representations of Intellectual Property and  
 characteristics of representational thought drawn by the Author

Unashamedly, a patent attempts to capture this intangible potential or capability, protecting or laying claim to things which may be thought but not yet realised – calling this commercialisation of abstract powers 'invention'. Consequently a key skill in forming a patent is in the ability to maximise its 'realisation ambiguity'.<sup>67</sup> Increasing the scope of a single application lays claim to the maximum virtual territory and is achieved by thinking 'flying machine' instead of 'aeroplane' – necessarily covering (over the differences between) a range of kinds of flying. Here the patent describes the form of the expression of the proposed application as generally as possible (e.g. a mechanism for flight) whilst articulating a fairly specific form of content (e.g. a specific aerodynamic method to produce lift). The aim of a patent is to claim prior authorship of a future reality through an ambiguous but nonetheless specific conceptual description (an analogue), which may be interpreted as providing a definition of identity in the right circumstances.

However, this desire for the maximisation of the realisation ambiguity is acknowledgement of the territorial proclivity of patent activity. 'Staking a claim to eternity' means deciding who may have access to what is, in effect, predicted potential, but it is done by imagining capabilities and giving them names to make them analogous objects: flying machines, loop-tricks.

In this approach, property is defined through the production of a principle of identity, creating an implicit universal subject ultimately based on a negative notion of scarcity of resource, in order to produce territories of exploitation and asymmetries of access and information. The power of the representation of intellectual capacity as Intellectual Property is complete when there is no disputation of difference. When all sense is good and common, the power to assert truth or ownership is not even a question that can be asked. Here the political power or capability that is reduced and hidden is the power to negotiate the limiting contract itself (rather than merely agree to be bound by its conditions or have no access to those territories of thought). IP is unable to assert or defend a natural proposition of ownership but continues to act as if it is, since this is the mechanism by which it constructs its authority and any subsequent identity of 'author'. Since there is no natural right to Intellectual Property, only a statutory one, no claim may really be considered 'spurious' when it is understood that the protections of IP are knowingly, arbitrarily drawn by the state and are at least partially determined by the power to assert authorship.

If the IP system is a pristine example of the systemisation of 'Representational thought', it shows that the universal subject and the judgement of common and good sense are artificially, socially constructed, and that their explicit purpose is to produce artificial scarcity in order to create resource imbalances to stimulate trade. Intellectual Properties are constructed to stand in for embodied capabilities - this epitomises the

operation and purpose of representational thought. However, while the IP statutes do explicitly articulate Intellectual Property as representations of intellectual capacity, the enabling fictions of representation on which it is based are rarely made explicit in the wider discourse of ownership - including, as Evans points out, in architecture (Evans 1997: 154).

OMA's Rotterdam Kunsthall was completed in 1992, and it was at this point that architect Gareth Pearce walked around the building and strongly felt that his student project design for the Docklands Town Hall had been made manifest – copied – in the Kunsthall's physical fabric (EWHC 2001: clause 30). He subsequently brought a copyright infringement case against OMA. Whilst his legal case might therefore appear to be about establishing a right, an origin or an author, it does so within the highly specific legal formulation set out above which is pragmatically designed to produce an economy of intellectual production. For the purposes of this document, this particular formulation provides a practical exemplar of the model of representational thought through the rationale employed by the courts and by Mr Justice Jacobs. It provides a formal, written insight into a representational process of distinction in the context of an architectural object, and serves to demonstrate how architectural knowledge is traditionally categorised in order to enable it to circulate in an economy of intellectual production.

### Claims of copying

My claim arises out of the manner in which I believe my plans were copied [...]. The copied plans would then provide a basis for a 'cutting and pasting' operation, in which modifications could be made by moving features or elements of my plans [...]. I emphasise that my complaint is of copying my plans as graphic works. The fact that the dimensions taken have ultimately had different functions in the final design is therefore irrelevant.



**(EWHC 2001: clause 42 (Gareth Pearce))**

Pearce was careful not to claim design protection over the 'Distinctive identity' of the Kunsthall, but instead to claim copyright infringement of his 'Original expression'. He was not arguing that the buildings were of exactly the same form, nor even that they were similar, but that there was some kind of genetic commonality in the formal outcome that was a result of his actual design drawings being directly used in the production of some stages of the Koolhaas design – the copying of his plans as graphic works in a 'cut and paste' operation. As one might expect, however, the judge attempted to untangle the 'Original expression' of the project by following the representational paradigm of Intellectual Property and proceeding from the object. He began with the origin of Pearce's claim, the latter's visit to the building, then visited the building himself and attempted to see and understand the similarities that Pearce saw. However, he was unable to see any similarity at all, and there was an immediate and distinct divergence in the fundamental (common) sense-making of the judge and the claimant.

I have been round the Kunsthall, I have a model of it and I have a model of the D'TH made from Mr Pearce's drawings. The buildings are simply nothing like each other.

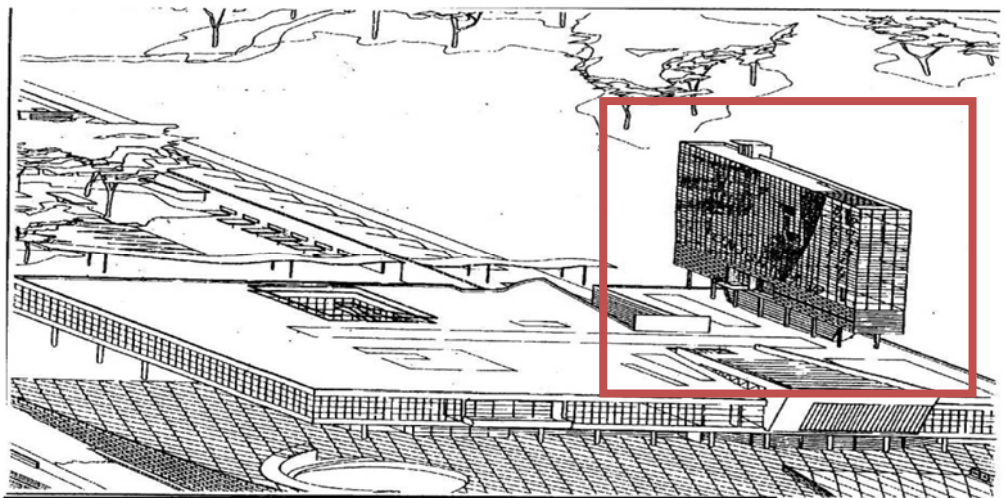
**(EWHC 2001: clause 32 (Judge Jacobs))**

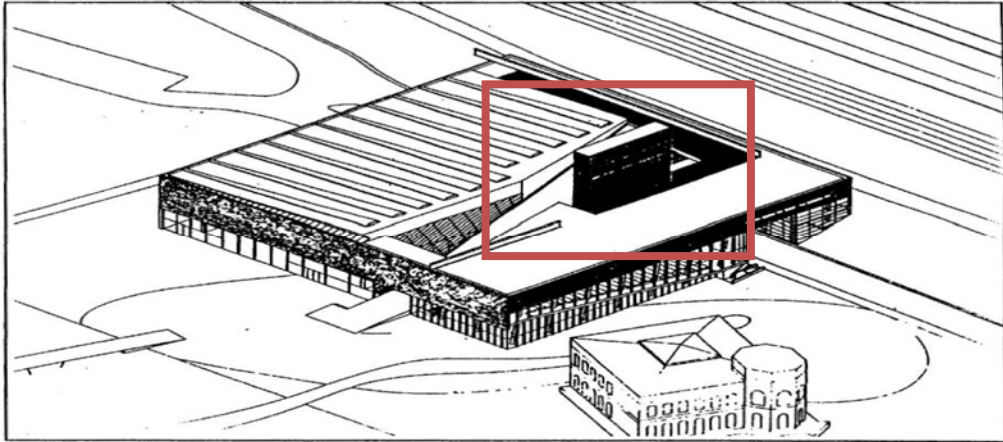
The judge began by literally comparing physical models as paradigms for resemblance and asking what for him was the simplest question: are the buildings physically the same? Do they look the same? And no, clearly they are not the same: they are not the same mental object; they are conceived differently by the common sense. If they were the same there would be a conceived identity between the objects, founded on the good and true

sense of the participants and there would, in effect, be no need for a judgement (the truth cannot be contested). Pearce attempted to explain his case by arguing that it was the similarity in the slab rising above the podium that first made him think that his design had been copied. Again, the Judge compared the two objects, finding that the difference between the two buildings is 'vast' and there is simply no similarity between them in terms of 'the slab' (EWHC 2001: clause 41). Furthermore the judge declared the perceived similarity to be the product of a 'fevered imagination', and detailed his judgement of dissimilarity:

Mr Pearce's slab is, as I have described, a six-storey office block floating at the end of his building on piloti. The 'slab' of the Kunsthal is much lower and much thinner being just a vertical structure containing lift gear and air conditioning equipment. It is not at the end of the building but offset from the centre. Mr Koolhaas provided a good word for it: it is 'fin-like'.

(EWHC 2001: clause 31 (Judge Jacobs))





**Figure 11\_**  
**Comparison<sup>68</sup> between axonometric drawings of the Docklands Town**  
**Hall (above) and The Rotterdam Kunsthall (top).**  
The 'slab' elements of both projects are indicated by a red  
rectangle marked by the author

The judge's common-sense answer goes further than 'no, they are not the same'. Rather, his response is focussed on the magnitude of the error - 'they are vastly different' – implying that he is affronted by this in the manner of 'how dare you say they are the same!' (EWHC 2001: clause 41). Common-sense is agreed by men of good sense and is evidenced by the perception of similitude, which tells the common-sense that the two buildings are not similar: they have failed the test of resemblance. Since in representation all that is not true of identity is the subject of error (Deleuze 1994: 167), it is the character of the man making the assertion that is now called into question. When something so obviously different – so 'vastly' divergent – is claimed to be the same or copied, representational thought feels justified to examine the 'reputation', 'reliability' and 'importance' of the participants.

Rem Koolhaas is one of the world's foremost architects. He is the holder of the Pritzker 2000 Prize, called by some, architecture's Nobel (the only British holders are Lord Foster and the late Sir James Stirling). In this action Mr Koolhaas stands accused of plagiarism in his designs for the Kunsthall in Rotterdam. The accusation goes beyond plagiarism, for he is accused of surreptitiously and dishonestly making or obtaining copies of the claimant's plans and using these directly in the design of the Kunsthall by a process of cutting and pasting.

**(EWHC 2001: clause 1 (Judge Jacobs))**

The very first line of the court judgement expresses the effrontery that the court feels on behalf of the hierarchy of truth represented by Koolhaas. The judge felt it necessary to comment that Mr Pearce was 'virtually unemployed' whilst Mr Koolhaas 'was regarded as a very considerable figure' (EWHC 2001: clause 7, 13). Thus, the judge supported the party with the most power to establish a 'truth' by devaluing the common sense of the weaker party – implying that as a lesser man (less good, with less good sense) - Pearce had less access to truth. Any appeal to good-sense or common-sense is evidently a conditional ordering of beings, a construction of hegemony. This difference in common-sense understanding of what is and is not similar between the projects even led the judge to take action against one of Pearce's expert witnesses, Michael Wilkey, for 'likening apples to Thursdays', setting a shocking legal precedent by referring Wilkey to his professional body for disciplinary action on the grounds that his evidence was 'So biased and irrational [...] I conclude that he failed in his duty to the court' (EWHC 2001: 49).

Clearly the views of the expert witness(es) did not conform to the judge's conception of the universal thinking subject which would share his 'common'

sense, given that Wilkey was the second expert to have advised Pearce that he had a case (Frederick Hill had already done so before the case went to court) and since the Architects' Registration Board (ARB) subsequently found that Wilkey was right to assert that copying had occurred (Salisbury 2003). Indeed the ARB's expert reviewer independently argued that it was more likely that the reader of his report would die in the following 13 milliseconds than that the graphic similarities between the two projects had occurred by chance<sup>69</sup> (Salisbury 2003: clause 80). The Court of Appeal subsequently reviewed these issues and accepted that there was a case to answer, granting Pearce leave to appeal. Nevertheless, Mr Justice Jacobs was correct in the more limited terms under consideration in this initial assessment. The 'similarity' considered by the architectural expert witnesses was not of a kind that may be addressed by design protection and the notion of 'Distinctive identity'.

### Functional representations

Mr Justice Jacobs began by considering Gareth Pearce's case in terms of 'Distinctive identity' and its design protection, and therefore concentrated entirely on the form of the determined object. However, the principle of recognition of the epistemological dualism operates through either the distinction of intelligible essences or of sensible appearances, and whilst here it begins with a discussion of representations of form, it quickly moves onto representations of function. The judge found a vast visual difference between the two slabs, but then went on to emphasise that they also have entirely different 'functions' (Pearce's is office space for a police station, whilst the Kunsthall's is for plant and escape stairs). In concerning himself first with the essence of form and then with function, the judge vacillated between the inherent dualism in the category of 'Distinctive identity' (which is also present in other IP categories). What is here *distinctive* is a judgement of intelligible essences – visual likenesses made by men of good sense. On

the other hand, what is here an *identity* is a representation of sensible appearances – a representation of a functional application.

For the judge, function might reasonably be assumed to be the particular use of a particular space, but it is in fact even simpler: function is a representational label – literally a label on a drawing – which determines the use of a space in the intellect (not in fact). It is an object in its own right that may be seen to be repeated and its owner and origin traced. The judging process is made against these convenient categories of representation, and affective capacities – what it does (to bodies) – must remain implicit. Whilst 'what it does' might be an obvious characteristic of the object, it is commonly reduced to a notion of function as a category applied to the design drawing – for example 'office' or 'machine room'. These categories or static objects of representation may be much more easily referred to for a judgement of identity than when understood as a particular performance. Consequently, when the judge placed emphasis on the dissimilarity of the tower 'slabs' in both their visual appearance and their labels of internal function, he did so in a distraction that failed to emphasise their most striking similarity, namely what they actually do: both serve as 'billboards'.

The relevant word on the plan – 'Billboard' – constitutes a pattern, a material determinant of the billboard-idea, a form of expression of a form of content as an organisation of material that enables the construction of a surface that may be called a billboard. The form of expression, 'billboard', has multiple, potentially divergent material realisations dependent on the capabilities of the body it has affected, but this is not the principle by which a repetition of similarity may be established in terms of copyright. If the elements from Pearce's plan, resized and rearranged with different labels attached to the spaces, also somewhere indicate 'Billboard attached to elevation', then the use of these aspects of his design drawings is indeed evidence of

'representational' copying of a material similarity in the drawings - but also of an affective similarity through the determinations they enable. Even when examining 'function', the judge identified properties rather than capabilities, in order to pin down the objects of ownership, contract or representation. The material representation of copyright conflates the form of expression (how it might affect others) and the form of content of that expression (how it is affective) into a single idea of form – which is subsequently explained either through essence or appearance.

Pearce's team subsequently claimed that 'the idea of a billboard was copied from the Docklands tower with the expert witness Frederick Hill pointing out that because Koolhaas's use of a narrow tower to house services which could have simply been placed on the roof was 'irrational' it was therefore suggestive of it being a formal idea copied from elsewhere (Hill (nd): Clause 7).<sup>70</sup> Protecting an idea is the realm of the patent however, and the court case did not deal with a patent breach but a copyright infringement. The 'idea' of a billboard is not a material condition but relatively indeterminate, and its status as something to be copied is therefore problematic in these representational terms: how can it be repeated if it is different? Consequently, the most that Pearce could claim is that a graphic element literally labelled 'Billboard' was reproduced in the Koolhaas design, and that it was sufficiently 'authorial' to constitute something that could be 'copied'.

The judgement of the object through the auspices of 'Distinctive identity' exhausts itself in attempting to identify aspects of the drawings with aspects of a building through the representational illusions of the same and the similar. It does so both with regard to the sensible appearances of functional representations and the intelligible essences of formal representations. How can a graphic element determine one thing in one plan and another type of thing on the copied plan – how can a balcony on one be a stair on the other?

In Pearce's claim the design drawings are not being used as representations of a final product but are seen to have a value in their own right, separate from their job as communicative determination or specification devices in a construction process (transportable records of final form). Here the interpretations or determinations made from drawings which are dissimilar in form (e.g. The Kunsthal and the DTH) but similar in content (i.e. containing some of the same lines) require some explicit additional agency. Here the drawing is not simply a device that addresses a universal subject – it is not merely a representation – and therefore more than common sense alone will be required to understand it.

By insisting that his claim was focused on the 'graphical' copying of his plans, Pearce requested that a judge in a copyright case understand the 'Original expression' in an architectural production as something created between the architect and the architectural drawing during the process of composition. This requires the judge to recognise a specific architectural performance that occurs between an architectural drawing and the production of a design – but in terms of IP this must be understood somehow as a *pattern* that has been 'copied'. This capacity is beyond the judge, because it is this very capacity that the representational paradigm, as manifested in Intellectual Property, is specifically designed to remove and resist. However, maybe because of his role in repressing such accounts, the judge also understood the need for an account of such a process with more clarity than Pearce's legal team and expert witnesses. In asking for such an account to be made explicit he reveals (for opposing reasons) the same weakness in the architectural discipline's ability to account for the value in its processes of production that Evans wishes to address.

At no point did Mr Wilkey begin to consider, as an architect, how, supposing use of the DTH plans, the copying could happen [...] you



would have an enormously difficult task in creating a very different building – they would be restraints on your thinking rather than aids. Mr Wilkey suggested you might save time – but conspicuously failed to explain how.

**(EWHC 2001: clause 55 (Judge Jacobs))**

Whilst representational dogma expects the drawing to conform to the idea of a directly translatable system of codification, the judge was nobly prepared to entertain the notion that a selection of elements taken from his plans using a cutting and pasting process could conceivably be open enough to produce divergent materialisations *and* codified enough to enable it to be copied. However, without help the judge could not imagine the embodied process by which an architect might decide to copy a form and then fit different functions into it. He was unable to imagine how a differential in the form of expression of the building – such as Pearce's 'tower slab' being wider and longer than Koolhaas's 'fin slab' – could be produced from the same 'original' set of plans (form of content). However, he was willing to believe that architecture might have its own implicit - embodied - system of codification which enables architects to read a creative pattern in another's drawings which is not a literal formal copy but a literary one like the copying of a 'characterisation' or a 'plot'. In this case at least, the discipline of architecture was unable to provide such an explanation and, ironically, the architect probably most able to do so – the defendant, Koolhaas – had a vested interest in remaining inarticulate.

When the judge asked - how did these drawings enable a speedy recreation of key elements of Pearce's design in a new context, with its own specific sets of constraints? - he was seeking to understand what common knowledge the drawings enabled to be shared between Pearce and

Koolhaas but more importantly what role the relationship between the architect and the drawing could play in the authorship of the building. At this point the judge approached understanding the design process as the serial creation of embodied affects between *a* drawing and *an* architect. The discussion necessarily therefore migrates to question particular design techniques and personnel – moving from similarity of objects and purposes to a discussion of cutting and pasting, scaling, transposing functions, exercising ranges and even to specify the perpetrators of these actions – e.g. 'not Mr Koolhaas'.

## 2 Originally common

The most that was shown was that sometimes, at the very beginning of a project, some at London OMA (not Mr Koolhaas) would copy a published drawing or picture of an existing building to see how it would 'sit' on a proposed site – a sort of ranging exercise. Nothing of the sort of cutting and pasting alleged here was ever proved.

(EWHC 2001: 19 (Judge Jacobs))

### Reconstructing the Kunsthal

What then are these ranging exercises copying? OMA are quite capable of drawing a rectangle of the appropriate size on a site plan. Why would they instead overlay the DTH (or anything else for that matter)? What range does it give them? Conversely, as they do use ranging exercises, why not use the DTH? It was available<sup>71</sup> and would seem to be at least as useful as sharing the 'diagram' of a Mobius strip as Eisenman and Koolhaas do in the CCTV project (see Figure 18). If they were to use the DTH for a ranging exercise,

would it provide a quick short-cut to see whether a building with a public route through the middle, which steps up a site and contains similar programmes (such as lecture theatres), would fit? To an architect, could it indicate the amount of similar programmes that could be accommodated? Whatever has been copied, it must be something that an architect may intuit from a few overlaid and reduced plans, and use as a way to begin to apportion form and programme over a site.

I have reconstructed from the judge's description a simplified plan and section of the DTH (Figure 12 below) and placed the most similar section from the Kunsthall alongside. When one compares the two sections, it may be seen that a route that runs through a park, continues through a building and steps up levels is a physical organisation common to both projects.

One of the allegations that the judge finds most confusing is that when the drawings were copied they were also changed from 1: 250 to 1: 200 scale. Contrary to the judge's assumptions, many of the programme elements would be unaffected by such an exercise. Indeed for an architect, a size-adjusted photocopy could be an obvious next step if a first attempt seemed too big or too small for the site, physically or formally. The auditorium might be made smaller, or retained at the previous size, using a different proportion of the floor area. The ramps might be made slightly smaller yet serve exactly the same purpose with no need to adjust their angle, as this might be accommodated in a relative change in the heights between floors. It is tempting to conclude that what has been copied is a form of 'organisation' – some of the actual organisation of the DTH. However, no static underlying pattern or copyright has been established because it is not the precise position, size and function of these elements that has been copied. In this case the copying must refer in some way to relative - proportional - compositions of ramp, programme arrangements, size,

massing, siting as well as number of more specific affective intentions captured in moments such as a 'billboard', a 'forest' or 'openings to the sky' over trapezoidal ramps. Rather than a discovery of an implicit, static organisation it is some kind of active relative composition which has been 'copied' or repeated, an activity whose relations of composition do not appear to reside in the drawings themselves.

### Exercising range

In the Kunsthall case, the plans and sections of a precedent are not used for the creation of an Intellectual Property as a 'Distinct identity', nor an 'Original expression', but the production of a different kind of creative knowledge. It is not for the purpose of determining spatial dimensions that a precedent is employed, but the fact that it has already modulated the substance of an architectural expression in space. The ranging exercise is a jump forward in time, allowing an immediate affective reaction to a much more developed set of potential arrangements than the initial drawing of a rectangle. The OMA team also manipulated and composed the things they copied when they performed a ranging exercise. They used a form of expression (e.g. Pearce's plan of the DTH) of a form of content (codified sets of relations suggested by the plan organisation) to affect the production of new forms of content, which simultaneously implied new forms of expression through the models and drawings necessary to express the embodied affect on the architect-producer. These new forms of expression of content were then used in a serial progression to solve the spiral-in-four-squares problem they had created for themselves by deciding to manipulate a 'precedent' as part of a creative process (the court was presented with a large number of process models developing the scheme, which now sit in the NIA archive<sup>72</sup> and were taken as ultimate proof of the creative ownership of Koolhaas).

The design team used all of these drawings and models as an expression of organisation with which to interact – along with the project-specific criteria they selected, which they were also affected by and which led them to select a 'precedent' in the first place (whether Pearce's project or one of their 'own'). The form of content of the expression of the drawings is able to repeat affective notions about compositions of architectural affects (to architects) through subsequent processes of composition. The architects would have to be intuitively aware of some of the potential affect of the relative elements copied from the ranging exercise and to be actively composing these affects to maintain their operation amongst new relations of constraint: e.g. 'we can put the mechanical plant in a tower and use it for the billboard in order to maintain a vertical element rising above the slab'.

For example, one of the most expressive decisions of the Kunsthall project is to have a ramp running right through an arts building, but this is unique to neither Koolhaas nor Pearce; in the Carpenter Centre (Le Corbusier 1965) a public ramp runs through a building raised on piloti. Hence the ironic Loop-Trick patent application appears to consider two oppositely ramped surfaces crossing each other as a distinctly different proposition from the bold move of incorporating a ramp through the entire length of the building. By using the auditorium as a ramp, and by crossing the auditorium with the public ramp, OMA create a situation that they claim has the effect of 'destroying the status of the individual floors and eliminating the distinction between above and below' (Koolhaas 2004: 76). However, this entering 'between levels' is similar to entering on the half-landing of a staircase, a common organisational trick in sites with split levels but not normally done with ramps because only a large cultural building could accommodate the necessary ramp length and the loss of useable space this normally implies. Rather, a key pragmatic design feature of the Kunsthall (in contrasting comparison with Le Corbusier) might therefore be the fact that these

ramped accesses are not actually part of the cost calculation of the floor area, since one is external and the other also serves as an auditorium. This cost relation is an implicit but constitutional relationship external to what is normally considered within an 'autonomous' design process.

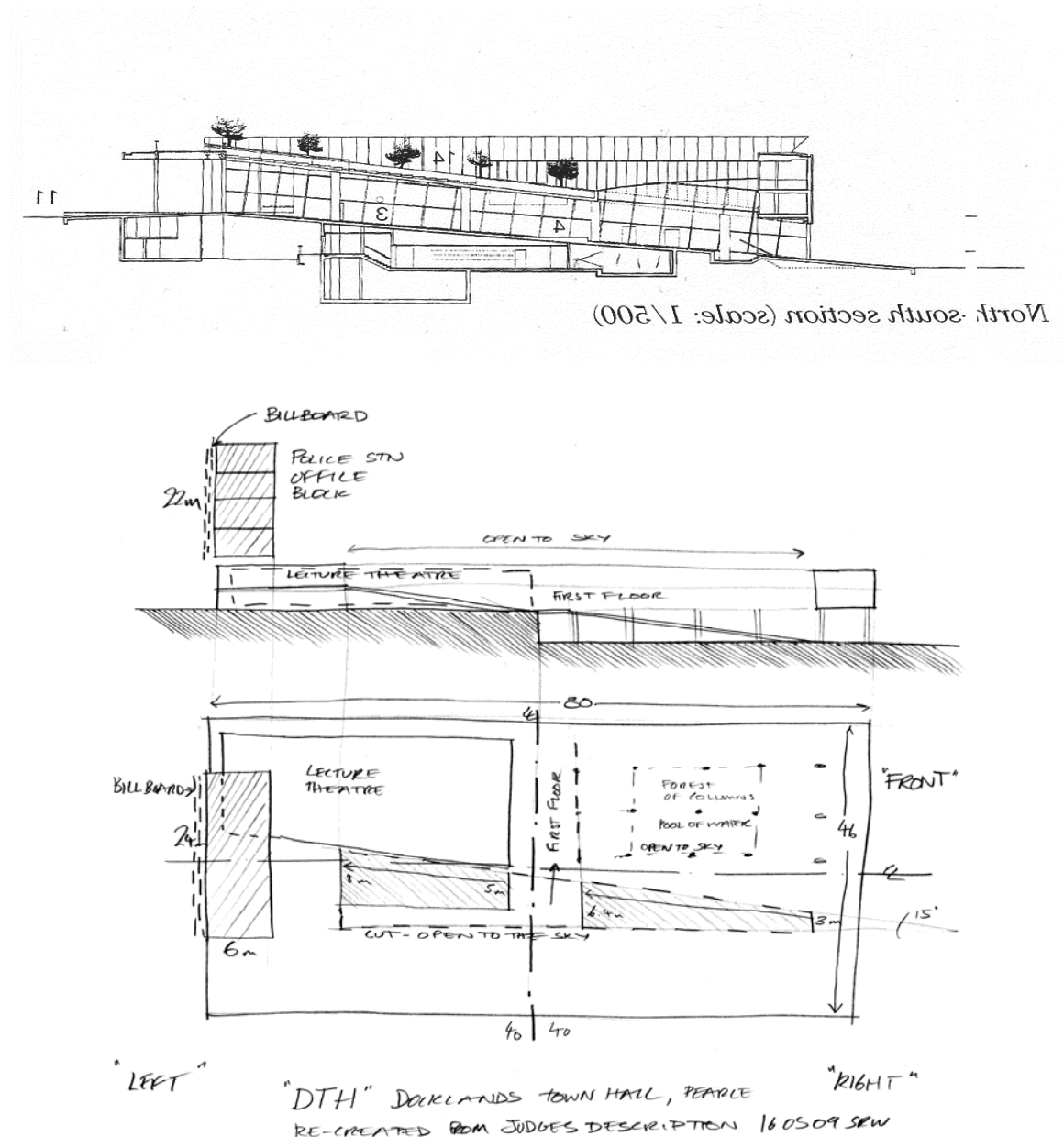


Figure 12\_ Comparison of the Kunsthal and the DTH  
DTH (above) as reconstructed from the judge's description with a reflected North Section of the Kunsthal (top) shown at a similar scale

## Twists, loops and spirals

The use of a ramp from dyke to park featured fairly early. In a number of models it was covered over by a roof running directly over it. The crucial stage was the idea of twisting the overhead ramp to let in light (model H). It was that twisting which created, in part, the trapezoidal area alleged to have come from Mr Pearce. It had nothing whatsoever to do with him.

(EWHC 2001: clause 62 (Judge Jacobs))

This narrative was proposed by the judge even though the DTH's triangular ramps are also open to the sky. The intellectual compromise of the judge is interesting here because he was willing to accept the argument of independent (parallel) genesis of the same form, which of course is an entirely irrelevant argument to be made with regard to IP's test of *prior* art. The actual modulations of the substance of the affective relations are what produce forms against which judgements of identity or authorship may be constructed. However, to produce an 'Author' this must be understood as an entirely static or fixed entity, or else the authorial moment becomes a multiplicitous series of more-or-less authoritative moments, acknowledging the contributions of multiple actors to the design process. Within this series of discernments from one move to the next, beginning with forms copied from somewhere else, the judge searched for one Original moment of expression to which an author could be assigned, in this case associating it with a 'twist' of the ramps. The judge did not look at this in order to begin to value or recognise affective labour, but merely to discover a moment that could be appreciated as 'authorial'. Even though the same logic actually supported Pearce's claim that his affective labour was stolen through use of his drawings as a precedent for the *developing* design, as we would expect

these 'preparatory movements' are acknowledged only ultimately, 'to ensure that [they] all [...] disappear in the result' (Deleuze 1994: 166).

In this case the form of expression of the building as a physical entity or as a pictorial representation of that final building are given priority over any forms of content which enable them. The drawings and models of its production are considered a pure form of content *within* the form of expression they will translate into. Physical models are once again seen as closer copies of the original model than drawings or visualisations. The perspective of pictorial identity views *the building* as a form of expression ignoring the content it has and views *the drawing* as a form of content ignoring the form of expression it has (for the architect). These two inadequacies are identified by Evans as the consequence of picture theory. In this representational thinking of architectural processes, the powers or capabilities which the representation is produced by or enables are dismissed – either in order to fix an identity to which an author can be assigned or to produce an object which may be seen as authored.

However, the creation of new affects seen as the production of a 'unique' moment, for example of 'a twisting of ramps to let light in', involves intuition of the potentials for affect of arrangements and compositions from the form of expression. What the judge saw as 'restraints' are in fact constraints (which might be more or less consciously chosen) directing the design process. The Koolhaas design is described as starting with a roof over the ramp, but this later being removed. In the DTH the ramp is shown to be mostly 'outside' the building, having no roof (and was trapezoidal). Here the precedent materials – whether the DTH or the 'architecture of the box' or decisions made about the site and the 'need' for a public ramp connecting spaces (which previously were not) are a set of compositional challenges which force the design process to problematise relations normally



(commonly) assumed to be fixed and internal or autonomous. The compositions of affective elements in new relations of constraint constitute the unique expression of the project. It could be these similarities in the embodied complexities of constraint that made the DTH a good precedent for a ranging exercise.



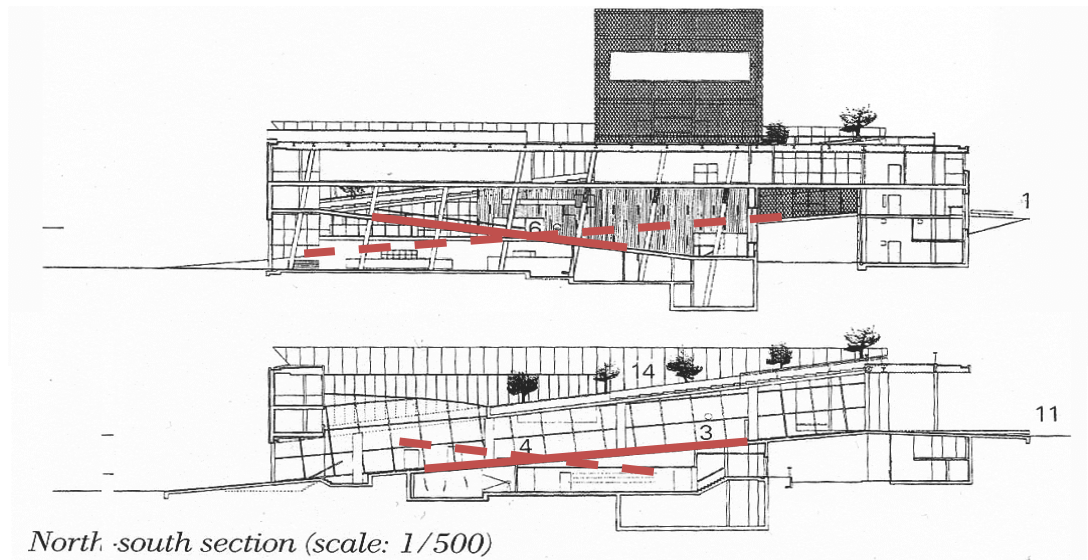
**Figure 13\_**  
**The Rotterdam Kunsthall, interior view**  
View from main gallery space looking across internal and external  
ramp toward the auditorium block  
Photograph by the Author



**Figure 14\_**  
**The Rotterdam Kunsthall, exterior views**  
Showing ramp entrance through the building, street side (Top left),  
park side below the dyke (bottom) and above the dyke (right) showing  
billboard slab.  
Photographs by the Author

### 3 Patent irony

#### Expressing the Loop-Trick



**Figure 15 \_**  
**The Rotterdam Kunsthall, North-South sections**  
 (with Loop-Trick intersection marked red)

Within the arrangement of the Kunsthall, there is a single occurrence of the full 'Loop-Trick'; it occurs where the auditorium and the external ramp meet – at the entrance point. It seems first and foremost to be a specifically important factor in the possibility of the auditorium, the site and the gallery circulation working together in this particular project. The Loop-trick taken together with the account of the design in S,ML,XL suggest that the Kunsthall design team resolved their design conundrum of articulating a sequential and interlinked gallery circulation whilst enabling a public ramp to run through the middle of the building – 'a spiral in four squares' – by allowing the building to be entered from this public ramp at the intersection point with the ramped internal space of the main auditorium. This results in an unusual piece of planning, which has the main circulation of the gallery

running through another (usually) discrete space – an auditorium. Jonathan Hill's reading of the actual Rotterdam Kunsthal suggests that the crucial, creative moment of the design process, which the Loop-Trick attempts to describe, occurs not with the special arrangement of circulation between two floors to enable the spiral circulation around the gallery spaces, but when the auditorium is allowed to be at once a circulation space and a discrete space through the incorporation of a curtain (Hill 2003: 50). This kind of moment where habitual - functional - responses are set aside for some reason appears to fit the frame in the search for what constitutes the unique architectural idea in this project - the production of authorial architectural knowledge. However, firstly, as an intangible asset it cannot be owned by any individual architect because it literally has no form - although it is embodied as potential. Second, it appears to be an architectural affect produced more generally by the discipline of architecture (since the 16th Century) and specifically developed in this instance through the serial application of the work of not just Pearce and then Koolhaas but also Le Corbusier (to name but one more). However, this is a moment when the design team appear to allow themselves to be personally affected by and to affect the form of expression of the project.

Instead of being dictated to by the form of content of previous models, the team appear to have interrogated their arrangement in terms of the affect it might have on its audience (visitors to an art gallery are usually quiet observers *during* their 'circulation' and therefore may not need such discreteness) and been prepared to challenge their own habits. Today, such a plan might be criticised both in a traditional architectural practice and within the academy, as it may be seen not to function 'properly'. Such a plan arrangement refers back to a transformation which began in the 16th Century (as described by Robin Evans for example) when separating 'circulation space' from 'room spaces' may be seen to have become a

sensible architectural strategy for the first time (Hill 2003: 50). However, the production of such an arrangement against the background of contemporary 'functionalist' architectural habit requires a personal creative intervention in order to support, believe or propose it.

The breaking of habit of the architect (of functionalism or of the shame of copying) is a moment in the design process when it may be seen to also become open to the manner in which the user can be in affective relation with the building. In Hill's account, an affective openness also becomes expressive of an affective capacity of the user since, in his view, the non-habitual plan form enables them to 'construct numerous alternative routes' and be 'mentally and physically creative' (Hill 2003: 50). However, attempts to make formal architectural design practices critical by only breaking *architectural* habits, risks resting on the assumption that there is *always* a causal relation between the critical nature of form and a user or audience, and implicit within this is the idea that the architect's range of actions are restricted to creating 'critical *form*' or that the audience or user for architecture can only be those who are acculturated to what might be seen as formally critical. As I note with respect to Peter Eisenman in the next chapter this can be characterised in the assumption that 'not all formal manipulations are critical' but architecture cannot 'be critical without formal manipulations' (Eisenman 2006: 74).

Whilst the process of 'opening up' to being affected might involve a moment in which the architect's habit is broken – it does not necessarily mean that this opens up the built expression of this process to be affected and affecting of a further audience. Neither does it mean that the built experience can only produce creative affects when the architect intends it to be so affecting. Expecting a direct casual link between the form of expression and the form of content of the expression is the path of determinism, with the preference

over expression or content as the mechanism of determination marking out the decision between *either* formalism *or* functionalism.

This expressionist understanding instead problematises the notion that there is a direct causal relation between the critical moment of the architect and the critical form for the user, understanding it as another example of the operation of the translation analogy. We would rather see the designer as an 'expresser' who will always attribute design qualities as *both* an intensive and extensive modulation of those qualities. These two forms of differential relation, the extensive form of the expression and the intensive form of its content, are realised as parallel, independent powers. The 'first' is realised in the process of being open to be affected (to what is expressed by an expression). For the designer this can be in relation to their own drawings, processes and actions (or those of others) as I have shown in the previous section. The 'second' power, however, is realised in the act of understanding and producing expressions for the purpose of speculative creation directed towards an increase in capability in *others* (rather than a containment of properties within the self or the discipline).

The first power of affect is concerned with the relation between the architectural expression and the architect themselves, and this is exemplified by a design process that uses a cut-and-paste of others' drawings, scaled photocopying, as well as an iterative series of models. This suggests an intellectually discontinuous design process through which the ideas for the built form must have been *drawn*. Here the set of drawings used as a starting point represent *without resemblance* a series of intuitions of one designer, which independently create, through an affect on another designer, a new series of intuitions. These embodied intuitions go on to select the affects they desire, and *project* them (along with others from other sources) into new affective compositions, which are in turn expressed

as actual physical drawings, models or diagrams. This is what Hill calls 'the drawing forth of ideas', as opposed to 'the drawing of appliances' that the representational paradigm of IP expects and enforces (Hill 2007: 166).

So the power to be affected (without being destroyed) enables the architect to transcend habitual form and propose an arrangement which becomes something with the potential to affect. Initially this is in terms of the negative (or positive) affect it might have on other habitual architects reading and judging the plan, but then secondly, in terms of the behaviours it may or may not enable when it is realised. If it is unacceptable to architectural habit, it may or may not also be affective to a 'user'. However, the architect can also attempt to project a real distinction of habit breaking in an external audience (rather than only within the profession). This would have the expectation of a particular result, some kind of correlation between the architect's imagination of an intended feeling and the actual feeling produced in an audience or user - but it is more probable that the architect might be able to feel an intuitive sense of forms of expression that through some kind of singularity, complexity or ambiguity, would lead to a particular kind of affective response in some audiences and not others.

The ambition of this intention to affect might be a specific visual one, for example to produce an iconic form, such as 'The Gherkin'<sup>73</sup> that comes to identify a particular city. It might be common to two or more architects, such as Pearce and Koolhaas (and Le Corbusier) but have a different form of expression in each case; for example, columns as trees in an undercroft space are mentioned by Pearce in his DTH project; 'Tree' columns appear in the undercroft gallery of the Kunsthal (having an eccentric geometry and being covered in bark); and are present in a similar pattern in an undercroft space adjacent to real trees in the Carpenter centre (Corbusier 1965). An intuitive composition of affects therefore acts towards an unknowable

future, because it acts towards an as yet unconstituted expression (and therefore audience for that expression). If this process of affection is understood in terms of either the form of content or the form of expression alone, then the architect acts as a compositional mediator between expressions operating as an elite form of common sense, judging in turn *either* its visual form or its intellectual function. However, if the process of affection is understood as embodied rather than purely intellectual, the second affective direction is opened and no longer reduced and conflated with the first.

The third aspect of the triad – the diagram – is understood as the intuitive potential that operates between these parallel (two-way), projective relations, which, in representational thought, are reduced instead to static, inherent understandings using *either* a synchronic *or* a diachronic categorisation. This third mechanism intuits the causes of the affect of forms of expression both over time and across different series and this is what enables the creation of situations which repeat particular affects in new circumstances (such as the discovery of multiple routes through a gallery by connecting points on a spiral). This third element is the location of the diagrammatic, critical moment because the factors which constitute the habit which must be broken and the audience which must be addressed must both precede the expression which breaks or addresses them and be only indirectly constitutive of their causes - in order to be able to subsequently affect them differently.

The intuition of the relations between the expression (the architectural object under consideration, be it building, drawing or sketch) and what it expresses, what its potential affects are and what it might do, is a diagrammatic relation. Intuitive knowledge acts – is expressive – and therefore operates through encountering the outside of the subject,



breaking habits and repeating difference – affecting through being open to being affected. The two powers of the architect's creative process – the power to produce affects and the power to be affected – must therefore be accounted for in parallel. Simultaneously sensing forms of expression as well as forms of content allows the architect to deliberately constrain a problem in order to produce a challenge that demands or forces a breaking of habit and to then be open to be affected by the impact of that change.

The form of content of the Loop Trick expresses an organisation that removes the hierarchy between floors and a form of expression (as a patent application) that enables us to discuss how it relates to a creative moment of for example, 'twisting around a spiral to let in light'. However, the intuitive 'diagrammatic' moment in the design process appears to occur where a shift from a habitual, modern, functionalist architecture of the box allows the destruction of programmatic discreteness. The patent application of the Loop Trick does therefore serve to show that representational thought recognises the value of potential. However, by recognising it, it captures, reduces and owns it rather than sharing or producing it - ultimately conflating its embodied potential to a single representation. As can be seen in my overlay of the actual Kunsthall organisation, the Loop-Trick patent 'diagram' is actually a simplified drawing of the Kunsthall and offers no new access to knowledge protection than the standard forms assigned to architectural production. Ultimately, then, the Loop-Trick 'stakes a claim for eternity' by reducing the process of design of the Kunsthall to a diagram of intersecting ramps, just as representational thought would expect.

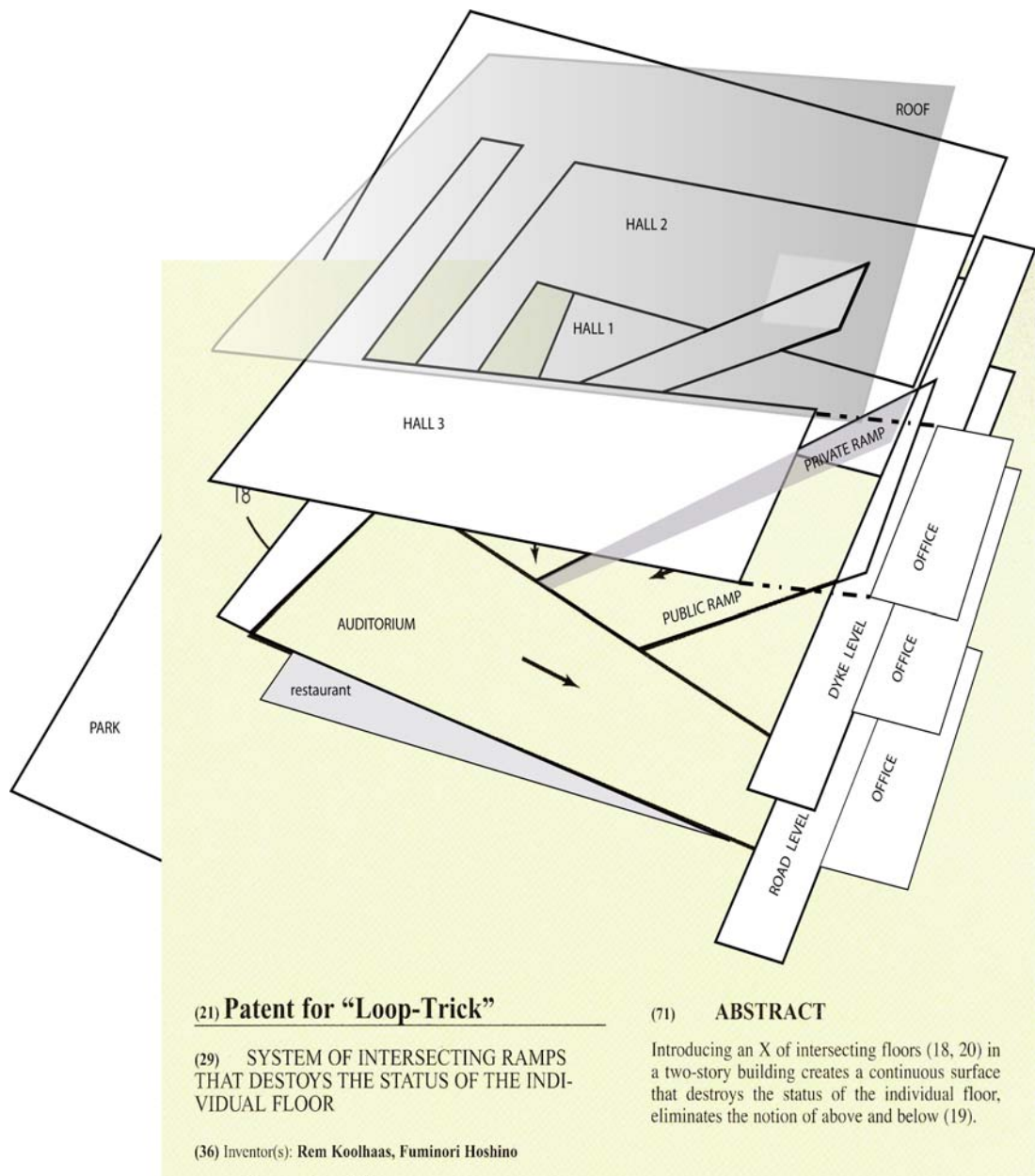
### Affective copying

No less than four of his former students, including Mr Wall (who had been Mr Pearce's tutor for the DTH project) had taught Mr Pearce. In

1978 Mr Koolhaas had written an acclaimed book, *Delirious New York*. He was not just a 'theoretician' as is now suggested. By 1986 he had been concerned with two practical offices which had designed many buildings by way of competition. One major building of his design had been built (the Netherlands Dance Theatre) and he had won a competition for the extension to the Dutch Parliament in The Hague – a design given much prominence in the architectural press.

**(EWHC 2001: clause 13 (Judge Jacobs))**

Although Pearce presented uncontested evidence that he had worked in the OMA London office and had been asked to leave his portfolio behind after interview for perusal by Mr Koolhaas, the judge saw instead the possibility that Pearce had in fact 'pre-copied' Koolhaas. As the judge fails to find the source of architectural knowledge in any of the representations he is presented with and does not receive an explanation from the profession itself regarding how embodied relations might constitute the design process, he slips the bounds of the representational paradigm himself. However, he finds himself only able to do this on behalf of the man of very good sense - granting Koolhaas the possibility of prior art as prior influence. In this



**Figure 16\_**  
**Incorporation of the Loop-Trick into the Kunsthall**  
 Overlay drawn by the author

moment he accepts the possibility of embodying the act of copying within affective relationships which transcend the individual representations with

which they were associated. In so doing he ironically acknowledges the subsumption of the model against which the copy can be judged within the operation of projective relations of affects of simulacra. However, whilst the representational notion of Author-Architect as Useful, Distinctive, or Original raises these problems of authorship, it is actually the mechanism by which these problematics are suppressed and bought back within the representational concept of identity, rather than understood in their fully differential and creative nature, as expressive productions.

So, when Mr Justice Jacobs accused the expert witness Michael Wilkey of corruption for supposedly likening 'apples to Thursdays', his anger was actually directed at architecture as a discipline, for having the temerity to suggest a topological or affective notion of similarity whereby only topography can be accepted. Representational thought operates through a diagram of identity that expects the domination of a common-sense and wills compliant conduct in the multiplicity of claims and claimants. Because representation both reduces pain and threatens it if contradicted, the result is compliance. Whilst Koolhaas has agency in his claims and assertions, he is in no way autonomous and there are numerous negative and positive affects provided for him by the representational paradigm. Representational thought becomes anxious when it is not given clear and distinct representations on which to base judgements - it is then that it is forced to confront its disingenuity. The affective or non-representational knowledge produced in the architectural process is skirted around or conflated into forms or functions by representational categorisation because it doesn't enable architectural processes to be valued in this traditional system. Commercial, professional architecture is currently obliged to use the representational mechanisms of value epitomised by the IP system - benefiting from its ability to market objects for exchange, but suffering its

inability to value the shared nature of creative processes of production and intention.

The object of representation for exchange (architectural identity, expression or idea) may come to reside in 'the author' because it is founded in precisely the same conceived identity as the discernment of the object itself. Since there is no natural right, no essential origin, but rather only capability to assert a claim, the one who successfully claims is the 'seminal' moment and place of origin. The author is ultimately the distinct part of the identity, the unique site of the expression, the applicator of ideas, and is a representational production just as much as the architectural identity, expression or idea – they demand each other just as the common and good sense of the Cartesian universal subject are inseparable. This coincidence of the author with the object of creation – since the object is ultimately the author's opinion objectified – means that both the object and the subject are constituted by their endurance, by their power to continue to assert themselves. The author as a common-sense entity is prone to the same illusions and produced by the same judgments as any other representation. In this sense, prior art only really means prior assertion, and assertion means the power to suppress contest. IP is a production of authorial representations, and these representations are literally territorial, defined by the limits of the power of enforcement of authorship. Architecture as a discipline profits from the same territories of value which suppress inequalities or differences in order to construct authorial identities and which prevent it from explicitly valuing its non-representational knowledge. Within the confines of representational thought only ownership itself may be 'created', and only the most powerful members of the discipline can assert themselves as creators.

## Compliance and provocation

'There's another comparison we could do. Here are two Moebius strips, relating to two very different intentions, two different projects by the two of us[...] we are talking about a gap of almost 12 to 15 years between the projects of course, so the comparison can't be a direct one.'

**(Eisenman and Koolhaas 2010: 10)**

Another of the series of faux patents published by Koolhaas in Content is 'Skyscraper loop (2002)'. This patent for a 'bent skyscraper' is described as a 'method of avoiding the isolation of the traditional high rise by turning four segments into a loop', and declares its first application to be the CCTV tower in Beijing (Koolhaas 2004: 511). In 1992 Peter Eisenman presented his work in progress for a 'looping' tower for the Max Reinhardt Schauspielhaus site in Berlin, at an event where Koolhaas was present and reportedly said that he found the project 'extremely beautiful' but Eisenman's explanation for the project unconvincing (WAI nd). Many years later, Eisenman and Koolhaas appeared on a discussion panel together, where Eisenman raised the similarity between the Max Reinhardt and CCTV buildings. Eisenman argued that both projects utilised a 'diagram' of a Mobius strip, a claim not contested by Koolhaas (Eisenman and Koolhaas: 2010). Many of the patent applications' texts discuss a tension between specific and generic architectural knowledge and it is explicitly recognised by Koolhaas that architectural ideas can, at least, be shared between his own projects such as the Porto Opera house, which started out as a house for a private client (Yaneva 2010: 86).

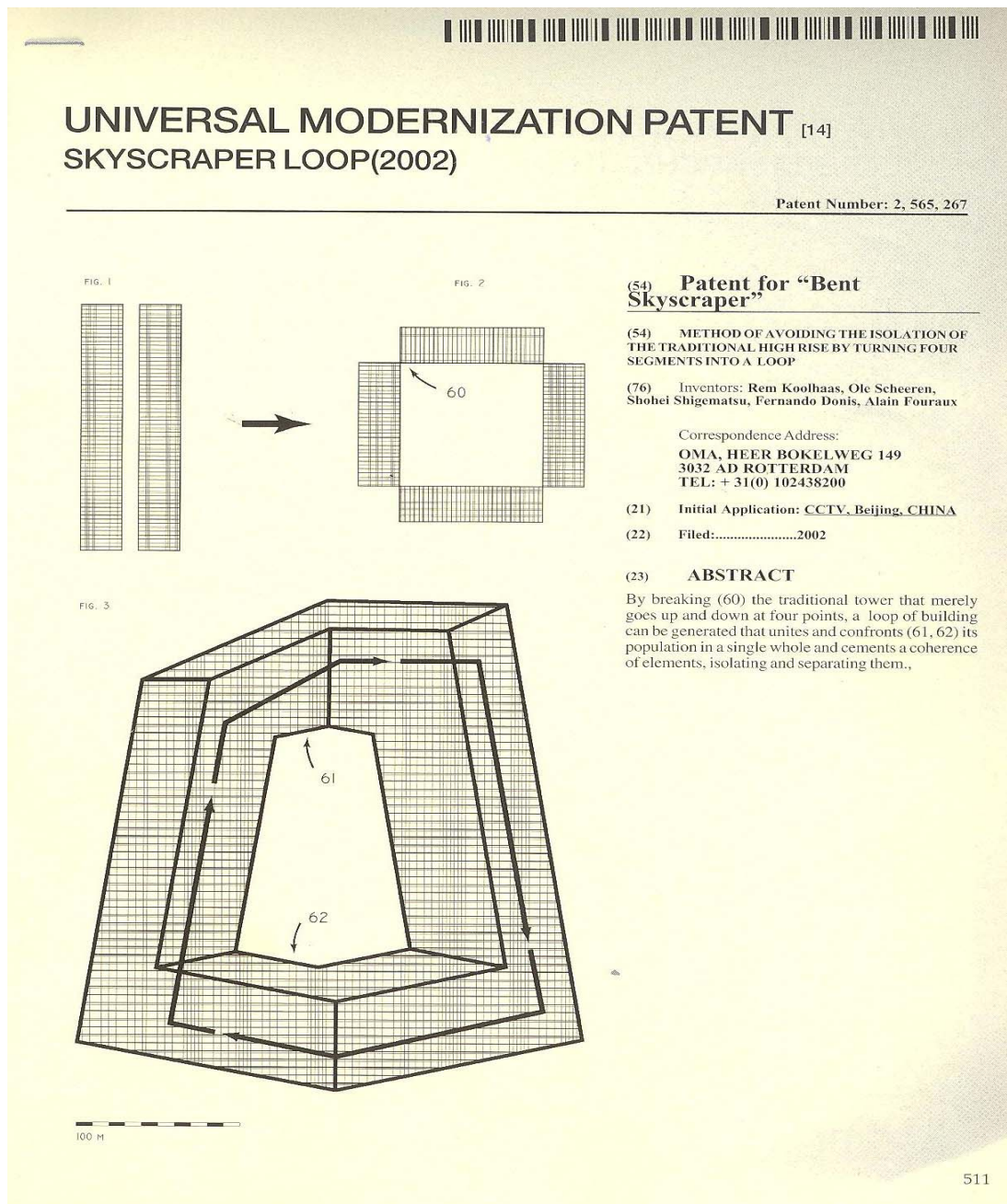


Figure 17\_  
Universal Modernisation Patent  
(Koolhaas 2004: 321)

RK: 'For me the important point to bring up regarding our current project for CCTV is not some point about the form. What is

interesting about the project is the incredible accumulation of new facilities[...]'

PE: 'You say the form of the CCTV is of less concern to you than content or programme. I doubt whether many people [...] will be concerned [...] with how well the programme functions [...] it is disingenuous to say that the iconic form is not what is catching everybody's attention. It is the icon that is the building's function. It is its content [...] CCTV [...] is fantastic because it is form as content not content as form.'

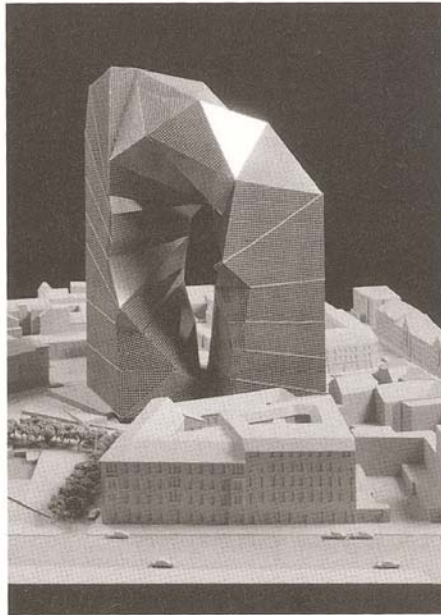
RK: 'You're right[...] we [are] completely obsessed with that too.'

**(Eisenman and Koolhaas 2010: 16)**

Koolhaas initially argues that the overall form of the tower is not important because it is the result of the construction of a diagram of function that produces the loop in the CCTV building. However, Eisenman pursues him on the grounds of compromised authorship and Koolhaas is thus obliged to concede that he cares as much for the form as content as he does the content as form. Koolhaas and Eisenman both appear to be clear that architectural form has both content and expression, although both also promote arguments which attempt to prioritise one over the other – programme or facilities in the case of Koolhaas (content as form) and the visual affect of the building as its primary purpose in the case of Eisenman (form as content). Whilst admitting to prioritise form of content merely as an essence of form of expression, Koolhaas argues (in the same debate in which he is conspicuously not accused of copying Peter Eisenman) for a broader conception of the content that architects might form and express 'in domains beyond architecture'. He suggests that the way to do this is 'by analysing political and other components of a project. [...] building up an intelligence that is not just a knowledge about architecture but increasingly knowledge about the [...] discrepancies in the world' (Eisenman and Koolhaas 2010: 13).



On the one hand, Koolhaas' copying of Eisenman, compared to his copying of Pearce demonstrates that in fact what constitutes copying is a boundary drawn according to the power to assert the territory of authorship, a territory that is accessed very differently for a Pritzker prize winner than for a graduate student or a 'virtually unemployed' architect. On the other hand, Koolhaas's decision to deliberately and unashamedly expose himself to the potential ridicule inherent in Eisenman's accusation of stealing could be seen as an heroic opening to be affected, the like of which the vast majority of architects within the existing hierarchy of both academy and profession would never countenance. Making clear that there are no legal or moral restrictions on the 'copying' of differential relations or diagrammatic architectural knowledge, beyond the power to assert them, appears potentially catastrophic for Koolhaas (although it proves to be ultimately rewarding). This is a position that Eisenman would never take because his cultural capital is established in different, more politically conservative circles. In the predominant and habitual atmosphere of representational accounts of architecture, even an ironic exercise in making explicit the fact that it is always the affective, embodied engagement of the design team that produces new forms of expression, and that it always uses the forms of content of other architects, living or dead, is an extraordinary opening.



Moebius strip by Eisenman Architects:  
Max Reinhardt Haus, Berlin



Moebius strip by OMA: CCTV, Beijing

**Figure 18\_**  
**Comparison of CCTV and Max Reinhardt towers**  
As shown by Eisenman during  
Supercritical debate with Koolhaas  
(Eisenman and Koolhaas 2010)

However, whilst Koolhaas does in some ways de-territorialise the field of architecture using a radical, socialist idiom, through his self-defined 'ironic

criticality', in this particular case, he demonstrates that he uses his own expressions of power to reiterate a concept of authorship that entirely conforms to the prevailing commercial, representational understanding. Articulating the argument that architectural knowledge, ironically, cannot even be patented because it comes in formless acts of composition enables an architect with cultural power to freely copy them since there is no enforceable form of prior art and therefore no such thing as an architectural patent. The key point that Koolhaas learns from the court case is not in relation to the details of who does or does not own a form according to law, but the fact that ownership is produced as it is performed. This calculation of the value of controversy becomes a power that both Eisenman and Koolhaas utilise. On the one hand it is knowledge of how these relations of power work that enables Koolhaas to so use a design in a situation which would fill a graduate student with shame. On the other hand Eisenman's reward is that he can make Koolhaas answer an embarrassing question and thus assert his cultural claim to 'prior art' as an omission of theoretical dominance. The diagram driving Koolhaas' position does not act to make the first patent rather than the first thought or expression but rather, leaves him acting in the knowledge that the traditional diagram of power means that publishing a faux patent for architecture is as good as having a real one. Koolhaas uses his intuitive diagrammatic knowledge to 'stake his claim' in a cultural territory rather than a legal one, and in disputation with Peter Eisenman it is clear that they both have very similar goals.

If an alternative or 'critical' epistemology is used in order to assert ownership or authorship and to reduce the collectivity of creativity to a representation for the purposes of financial exchange, then it may automatically be thought to have less embodied Critical potential than one that asserts autonomy as a more complex social arrangement. However, the embodied test of criticality must be placed in the context of both the properties and capabilities of the

(non-authorial) body to survive and prosper *within* the prevalent and dominant dogmatic image of thought. The key lesson of an expressionist, anti-essentialist approach is that there is no universal subject and every body has both specifically limited actual capabilities and relatively unlimited virtual potential. As such this understanding requires the 'Critical' moment of autonomy to also be placed within a diagrammatic context of power.

It is not, therefore, the relations between culture and form or capitalism and design, which should be considered the site for the construction of a critical autonomy - but rather - both the properties and capabilities of the non-authorial body in relation to the diagram of power in which they operate and which they satisfy, augment and contest. It is in this way that individual Critical moments may at once be seen as constitutive of a collective notion of social critique and an individual personal expression of Critical potential. This enables a separate and simultaneous discussion of the manner in which such actions also consolidate and repeat dominant diagrams of power. The Critical distinction here must be a real one that cannot be predicated on an intellectual ideal but instead must respond to what *can* actually happen. However, it must do so without prescribing the actual within the merely intellectually possible, as this would once again restrict its existence to a limited imagination rather than a creative and unpredictable exercising of potential.

Given the prevalence of representational thought and its synonymy with capitalist modes of production, a Critical position should not be misunderstood as one that must operate entirely outside of these mechanisms, nor such a hopeless definition be used to disparage or dismiss any undertaking that is necessarily compromised, as Hays argues contra Tafuri (Eisenman 2003: 202). On the other hand, given the knowledge that criticality relates to the use of particular epistemological positions – either as

expressions in their own right or to inspire or justify particular creative practices – how these positions are 'embodied' (in the sense articulated by Heynen) becomes the place where the test of critical potential may be made.

This chapter demonstrates that the dualist representational process of thinking and judgement is a predominant and prevalent mechanism for understanding architectural production in wider society - and that it deliberately keeps implicit relations of power in order to maintain its coherence. It shows that architectural epistemologies generally comply with these systems of thought in order to enable architectural products to be valued and exchanged within capitalist systems of production. However, the chapter also shows that architecture benefits less from this system than do other forms of authorial production because by its nature it is produced through serial and parallel affective forms of labour which are singular to each project. In this case, it is clear that architectural epistemologies, which seek to establish authorship with respect to social and economic mechanisms of exchange, are predominantly beneficial to those with the power to assert ownership, not merely through the courts, but also, significantly, through disciplinary hierarchies and publicity machines.

The ultimate Critical question, in terms of acting non-representationally, rather than anti-form or anti-function, requires that our ethics and our aesthetics are judged in terms of both their form of content *and* their form of expression, and if, in the case of Koolhaas and Eisenman it appears that they have separate architectonic and culturally discursive formal productions, then these too, must be separately examined through this parallelist lens. In each case a causal mechanism must not be ascribed to a manifestation which has no such power of determination and the affects of formal, visual productions not conflated with discursive cultural articulations.

Instead the virtual diagram of power which connects and drives both actual aspects of the triad must be located and illuminated in relation to the actual bodies and the actual capabilities through which its operation is enacted. It is in locating this relative and embodied judgement that is the distinctive site of the Critical moment for both the individual and the discipline: Does Koolhaas' strategic and intuitive understanding of the discipline of architectural power production (at the level of a building, a project or a propaganda campaign) act to resist and provoke the dominant regime of power, or does it persist in complying with it (but only insofar as he is able to resist compliance, only insofar as he is capable of provoking)?

Asking such questions, continually and as a matter of course demonstrates a key consequence for this Critical approach of always making explicit - in parallel - the two-forms of architectural expression. What would previously be seen as digressions into the political and cultural ramifications of the enabling or constraining social context (which are normally necessarily constrained to deterministic or essentialist explanatory heritage) are here seen as necessary constituents of the ethical *and* aesthetical productions of every *individual* architect and the discipline as a whole.

## 4\_Formalising affects

If one looks back on the work historically, in 30 years from now, will it be said that this loss of ideology was a late period, a playing out of an endgame? [...]. When politics and economics become the ruling factors, any critique – while perhaps more necessary also becomes more problematic [...] if one cannot displace function, which is an ideological trope of the work, then the work itself must be re-examined.

(Eisenman 1999: 208)

In this chapter I show how Peter Eisenman's approach to architectural production and his explicit attempt to construct a formalist architectural project relate to the triadic notion of expression and the Deleuzian concepts of 'form of content', 'form of expression' and 'diagram'. The previous chapter examined both the visual and articulable aspects of the formal production of Koolhaas but concentrated more on their expression in the products of *practice*. This chapter also follows the triadic episteme by insisting on the dual formal nature of production but in this context concentrates more on addressing the *theoretical* expressions of Peter Eisenman. I will show that despite a continuing evolution of important aspects of Eisenman's theoretical position, his arguments for an immanence of formal expression have remained centred around an axiomatic definition of the discipline of architecture, a definition that requires strict boundaries to be drawn and enforced. By articulating the differences, both in principle and interpretation, of key distinctions made by Eisenman and Deleuze, I will explicate some key features of an alternative 'problematic' approach to the formal analysis of architecture. The chapter has three sections. First, 'previous form', discusses

the genesis and character of the formalism that Eisenman proposes for architecture. Second, 'critical histories', examines the distinction between Eisenman's and Deleuze's interpretation of 'the formal' and briefly places both positions in the context of the Critical architecture debate. Third, 'the desiring-subject of diagrams', focuses on a practical example of the interpretation Eisenman makes in his creative process of Deleuzian theoretical concepts in order to delineate a precise definition of diagram in his architectural practice and to establish the divergence in interpretation from a Deleuzian position.

# 1 Previous form

## The purpose of form

One of my theses will be to affirm that formal considerations are *fundamental* to any architecture, irrespective of the style and that these themselves can help us develop a language agreed upon *both for criticism and for project work*, the detailed nature of which, its grammar and its syntax, will not be considered for reasons of space. [...] *the essence of every creative act can be thought of as communication of an original idea of the author to the person who receives it via an expressive means*. And the expressive means must be such as to *transmit the original intention as clearly and completely as possible to the person who receives it* [...]. In architecture we must *establish a basic priority* to evolve from the dialectic between relative and absolute finalities[...].

(Eisenman 2006: 30, emphasis added)

Eisenman's PhD thesis, The Formal Basis of Modern Architecture has recently been published alongside an 'extended, diagram-driven



investigation into the work of Giuseppe Terragni' (Kwinter 2003), which was based on work undertaken for the PhD (Eisenman 2003). Eisenman argues that his fundamental formal definition of architecture aims to enable the discipline 'to evolve from the dialectic of relative or absolute finalities' in order to escape the fictional origins, functions or zeitgeists that they imply (Eisenman 2006: 30). He proposes construction of a formal language of architecture, which operates as an abstraction from the actual physical forms that the discipline produces but both enables a critique of those forms and their production. His methodology involves focusing on the 'fundamental' formal considerations of architecture, which he approaches through the analogy of language. Through this lens he sees architectural creativity as produced through 'authorial' transmissions judged according to the clarity they possess for those addressed.

While Eisenman side-stepped the exhausting complexity of the task of really constructing a linguistic-architectural formalism by simply acknowledging that such a project is beyond a single PhD, he has continued an enormously fecund production of formalist inspired architectural-theoretical writings alongside and at times explicitly in parallel with his production of constructed form. As the nature of his practice has changed and evolved, so have many of the theoretical references and inspirations he engages with.<sup>74</sup> Eisenman says that his PhD was a 'critical response' to 'dialectically refute' the arguments put forward by Christopher Alexander in Notes on a Synthesis of Form (Eisenman 1999: 7).<sup>75</sup> However, the desire for the development of a formal language for architecture (whether linguistic or mathematical) was on trend with theories of the time (Matthews 2001) and *both* Eisenman and Alexander argued for the construction of architectural formalisms – the key distinction being that Eisenman employed linguistics whilst Alexander used 'set theory' borrowed from mathematics (Eisenman 1999: 7). Eisenman proceeded initially by referencing the linguistic structuralism of Noam

Chomsky, at the height of his fame during the late 1950s, but also heavily (although implicitly) borrowed from the Formalist methods of literary criticism in which linguistic structuralism originated.<sup>76</sup> Whilst beginning with references to Chomskian<sup>77</sup> structuralism through concepts such as 'generative grammar' in his 'Houses' period,<sup>78</sup> as linguistic theories have evolved independently of his use of them, Eisenman has also shifted his theoretical accounts and made numerous additional connections to a range of structuralist and post-structuralist theorists. For example, he has made the link with European post-structuralism<sup>79</sup> through referencing Jacques Derrida and his concept of 'deconstruction',<sup>80</sup> and with Deleuze in a 'folding' period.<sup>81</sup> In the most contemporary terms, references to Deleuze are made by Eisenman through the concept of 'diagram'.<sup>82</sup>

In Diagram Diaries (1999), Eisenman addresses contemporary architectural interest in this Deleuzian concept by simultaneously dismissing many of its most famous advocates as part of asserting an authorial role in this field – claiming to have placed 'a continuing emphasis on the importance of theoretical influences in architecture' for the last 30 years. In this text a variety of nameless contemporary 'digital' architects who have especially enthusiastically employed and discussed Deleuzian theories are derided as suffering 'cybernetic hallucinations' – presumably referring to Novak, Lynn, Spruyboek<sup>83</sup> and the like. Similarly it may be assumed to be Frank Gehry who is described as creating 'random' blobs which do not understand architecture's 'anteriority', and Rem Koolhaas and MVRDV who are described as the 'less seductively computerized Dutch advocates of the Diagram'. Eisenman's broad critique of the use of diagrams in architecture is also the point at which he enters the Critical/post-critical architecture debate, warning Somol, one of the key 'post-critical' advocates of the diagram, against presuming that diagrams immediately imply social engagement (Eisenman 1999: 27-35). As noted in chapter two, Eisenman's

position in the Critical architecture debate is highly contentious, with prominent critics holding both highly positive and strongly negative views of his theoretical and practical contribution.

For example, on the one hand, the philosopher James Williams uses Eisenman's Rebstock Park project as an example of 'a Deleuzian ontology in action' and argues that Eisenman goes beyond simply inheriting ready-made concepts and begins to create 'philosophy in architecture' – a claim that, whilst potentially edifying for both of them, is also very exciting if true (Williams 2000: 200-219).<sup>84</sup> In absolute contrast, Anthony Vidler believes that Eisenman envelops himself in a Deleuzian terminology of diagrams simply 'to invent a pedigree and gain legitimacy for his morphological experiments' (Vidler 2000: 5).

Eisenman's artistry is partially attributable to the defective characteristic of this theoretical writing, which occasionally descends into a lunatic, intellectual cacophony bursting with energy [...] there would be no point at all in demanding that the architecture live up to the writing or that the writing correspond to the architecture [...]. It is this manic, feckless, intellectual agitation that induces the faint, subtle and spell-binding mirages of movement within.

(Evans 1997: 136)

Providing a third perspective, Evans argues that the voluminousness<sup>85</sup> of writing about Peter Eisenman's work is such that 'any opposition to the content ends up merely adding to and affirming it, since its chief property becomes size and frequency rather than any decided meaning' (Evans 1997: 120). He calls Eisenman's writing an 'armoured vehicle' that is part of a pre-planned defensive strategy, including evasions such as 'bluffs, smokescreens and dodges' (121). For Evans, the arguments that Eisenman produces, based

on a promiscuous use of linguistic and philosophical terminologies, are 'at best tangential to the work itself' and are 'unnecessary because the work itself is much more interesting than its justification' (127). Ultimately, he considers Eisenman's textual positioning to have other, strategic goals, since it demonstrably does not attempt to construct rigorous – (literal, rationally coherent) – theories about the relationship between drawing and object not even, for Evans, in relation to his own work (127).

Whilst the form of expression of Vidler's critique might therefore have the opposite of the intended affect (legitimizing instead of critiquing), the form of content of his critique remains of interest, suggesting as he does that Eisenman's utilisation of theoretical explanations are a means of positively affecting an audience of his peers to view him *simultaneously* as both historically grounded expert and radical innovator. These apparently contradictory positions require that whatever the forms of expression (the affect of pedigree or of legitimacy) then there are also forms of content (historical knowledge, theoretical prowess) required to satisfy and stimulate their audiences in order to achieve these strategic aims – but the form of the expression is not necessarily coherent with the form of content that constitutes it, because while related, its affect is constructed in parallel and through a different set of embodied encounters.

This understanding of a particular kind of separation between the form and content of Eisenman's theoretical production *as well as* the form and content of his practical production is key to the development of this chapter. As I have argued in earlier chapters, this separation should be seen in terms of a parallelist and expressionist conceptual frame in order to avoid repeating dualist reductions. In the example just given, the form of content of Eisenman's theoretical position for Vidler (theoretical consistency) is also form of expression for the philosopher James Williams who, bewitched by

apparently supportive architectural constructions, finds a transformative relation between Eisenman's formal products and ways of thinking. A key point here is that the forms of content of expressions and their forms may produce independent affects depending on the audience they are placed in relation with. This is an essential understanding for the analysis of Eisenman's – axiomatic – formalist position that follows. As seen in the previous chapter in relation to Koolhaas, both he and Eisenman appear to have distinct purposes or forms of content which operate almost entirely independently of their expressive formal production. While Koolhaas offers 'propaganda as an ironic criticality' as a way of creating an authorial statement for OMA/AMO I argue that in Eisenman's case his linguistic theoretical exposition serves to create a necessary authorial representation against which the value of his architectural practice can be performed. However, rather than 'dissimulating representation' as he argues, he uses this disjunction to dissimulate his own powers. Ultimately, Eisenman and Deleuze provide implacably opposed but subtly distinct answers to the same question: what is the purpose of form?

A formalism may be generally defined as an exploration of the potential of a particular discipline through construction of an autonomous definition of the symbols it uses and the set of rules which govern their operation and relations. Formalist approaches simplify or reduce the practical aspects of a discipline to enable exploration of an introspective potential of the disciplinary mechanisms of production, and in so doing also produce complex and problematic discussions of the relationship between formalist activities and the instrumentality of those activities. For example, in mathematics, David Hilbert (1862-1943) proposed a formalism that argues that the meaning of the formulae being manipulated is not relevant to the processes of manipulation themselves. A criticism of a such a position (as made by Ludwig Wittgenstein, for example) is that if a short-cut may be

found in everyday life which does not require use of the formal manipulation provided, then the formalism is epistemologically unnecessary (Diamond 1976). The distinction between the role or boundary of the formalism with respect to the real conditions of existence are crucial in deciding what kind of relationship the conceptual and intellectual manipulation of the formal abstractions of the discipline have to the products of the discipline, and then to the relationship those products have outside of the discipline. For example, Hilbert's formalism is able to circumvent some criticism by limiting its purpose to particular classes of mathematical problems which are defined by being an epistemological short-cut through just such a formal manipulation (enabling conclusions that could otherwise only have been reached by a longer, more unwieldy proof). This forms part of a broader argument that defines mathematics as a conceptual activity that does not depend on consciousness - rather than an empirical science (Webb in Duffy 2006: 108).

Similarly, to this necessary distinction of 'the purpose' of a mathematical formalism, the construction of a formalism in linguistics first required a distinction to be made between literature and non-literature, thus drawing the boundary of the formal discipline in which to construct a formalism of *literary criticism*. The literary formalist method was characterised 'by the attempt to create an independent science of literature which studies specifically literary material' but it was immediately noted that 'the object of the science of literature is not literature, but literariness' (Eichenbaum 1926). The literary formalists arrived at a definition that emphasised the intention of the linguistic expression and made a distinction between communicative language, which has 'no hidden purpose', and artful systems in which patterns may be said 'to acquire independent value'.<sup>86</sup> The literary formalists' primary distinction argues that 'simple' communication is just what it is, but more artful communications have both a form of practical content that 'lies

in the background' and more prominent expressive forms or patterns which have a separate, independent value. The definition of artful forms of expression is deliberately intended to relegate the 'practical' forms of content of that expression – because this is the nature of the distinction that they are seeking to produce. Eisenman appears to begin his formalist project for architecture by following the literary formalists: He distinguishes building from architecture in the same way that they distinguished literal language from literature. He argues that architecture may be discerned from 'building' by the clarity and power of the intention of the architect and how these intentions are communicated – how it manages to 'project and sustain' the architect's communicative intentions.

However, the literary formalists argued that a further distinction is then needed because the common-sense recognition of literary value does not in itself enable them to make the specific judgements they require - to locate the artistry of a specific work of a specific author. Eisenman also follows this literary approach by arguing that the intentional act of the architect provides the power necessary to overcome the reading of habitual existence. In this approach, if this intentional moment is where the habitual and the extrinsic are overcome to produce an intelligible transgression (in the sense that it must paradoxically both make sense *and* be different), it is done in order to produce a *literary* wall rather than a literal one and to define a particular literary nature within the literariness of architecture (Eisenman 1999: 30).<sup>87</sup>

But these general acknowledgments that there are differences between poetic and practical language and that the specific quality of art is shown in its particular use of the material were not adequate when we tried to deal with specific works. We had to find more specific formulations of the principle of *perceptible form* so that they could make possible the analysis of form itself – the analysis of form understood as content.

(Eichenbaum 1926, emphasis added)

The literary formalists further specifying concept of 'perceptible form' introduces the idea of a particular kind of artistic awareness distinct from that of non-artists. For example, in their definition a 'distracted observer' would not even see the walls of the room because 'we do not experience the commonplace, we do not see it; rather, we recognize it' (Eichenbaum 1926).<sup>88</sup> Artistic perception enables the walls of the room ('wallness') to be seen by disrupting the habit of distracted recognition. As I have argued in chapter two and demonstrated in chapter three, the construction of a common-sense distinction presumes the existence of a good sense that allows us to produce a second distinction between individual perceptions and the common, or rather enables them to be recognised as the same. In this manner the formalist distinction follows the flaws of a dualist, representational approach. However, the literary formalists make the distinction of 'good sense' in terms of an overcoming of the habit of recognition, and when they define 'Artistic' perception as that perception in which we experience form – 'perhaps not form alone, but certainly form' – they are articulating the particular embodied affect of the literary work on the reader (Eichenbaum 1926). Here, form 'understood as content' means form understood as the embodied perception of the audience, and it is this aspect of their approach that offers non-representational, expressionist potential.

In this literary understanding of forced perception, form is understood as an element of art, as constitutive of the work. In this sense the formalists idea of 'form' articulates an approach that they think 'acquires new meaning; it is no longer an envelope, but a complete thing, something concrete, dynamic, self-contained, and without a correlative of any kind' (Eichenbaum 1926).



The artistic communications which acquire independent value in 'literary' literature are produced in these pure moments of intention between artist and perceiving audience, and in this case artistic form is an expression that may be said to have an independent value that is almost entirely formal, and almost no content that is not hidden. This approach identifies the simultaneous presence of forms of content of expressions and forms of expression of content. However, for the purposes of a literary formalism the concern is only the formal expression – defined as the ability to affect (force perception upon) the reader. Here the forced perception of the formalists is a form of expression without any content. They argue that the audience is affected only by that form and therefore, from the disciplinary perspective, the content of that form is almost irrelevant ('in the background'), although it remains a constituent to the affect between the form and the reader or viewer.

To pursue a formal argument today [...] would require neither an immanence that is posed in moral terms between time or historical precedence nor an immanence of traditional essences and appearances [...] such an immanence would have to suggest a formal concerned with the random [...] a formal that does not respond to its own former conditions [...] would have to utilize precisely its capacity to de-contextualise itself. For quite rightly it can be thought that such a concept of the formal would have no immanent originary relationship to its content, and it is the absence of these relationships that would become its only immanence. This immanence is the formal's potential critical and therefore political content; it is this which has the capacity to undermine the tradition of architecture.

(Eisenman 1995: 90)

Eisenman sees this notion of a formal immanence – an absolutely direct relationship between expressive forms and the expression of those forms –

as being at the heart of a political and critical project of architecture. He argues first that it is important not to attempt to construct an immanence between the usual dualist poles of essence or appearance (his argument against Deleuze) or in terms of what he sees as a moral historical case (his argument against Manfredo Tafuri). The key feature of the literary formalists approach, which Eisenman seeks to follow, is that the inter-relation between the form and the subject is neither an intellectual nor an apparent distinction but precedes that distinction and is therefore the process by which those subsequent distinctions may be made: it is both a concrete whole rather than a surface veil and singular and self-contained rather than a mere essential association. This is to say that the form is an immanent relation between the object and subject which does not attempt to construct a separate relationship between the form of the form and the form of the content of that form. The causal or immanent originary relationship is simple and absolutely direct and decided by affect – by what it does to the reader, the power it has to force a perception. It is precisely this implicit concept of 'Form' as a forced artistic perception – and the apparent conflation between form and content – which continues to serve as the focus for Eisenman's ongoing attempt at the construction of a formalism in architecture.

We had to show that the perception of form results from special artistic techniques which force the reader to experience the form.

(Eichenbaum 1926)

However, the literary formalists also realised that they were logically required to demonstrate that the 'forms' which define literary worth in a particular case are produced in disciplinary specific relationships constructed between the artist and the perceiving audience: They had to do this in order to retain their primary distinction between literature and literary-ness. In this

understanding the artist has to be shown to have forced the reader to experience 'form', but this has to occur *within* the literature in order for the reader to have an experience *transcendent to* that literature. They decided that they had to locate 'artfulness' subsequent to *and* inside of the productive distinction between directly practical and artfully useless, because this defines the discipline of literature in which they sought to discover literary-*ness*. In Eisenman's attempt to respond to the requirement that no originary relationship be produced with respect to the content of the form, he also makes a further, secondary distinction: the forcing of perception has to be 'intentional'.

To distinguish architecture from building requires an intentional act – a sign which suggests that a wall is doing something more than literally sheltering, supporting, enclosing; it must embody a significance which projects and sustains the idea of 'wallness' beyond mere use, function or extrinsic allusion. Thus its paradoxical nature: the sign must overcome use and extrinsic significance to be admitted as architecture; but on the other hand, without use, function, and the existence of extrinsic meaning there would be no conditions which would require such an intentional act of overcoming.

(Eisenman 1979: 127)

Eisenman argues that 'not all formal manipulations are critical' but that architecture cannot 'be critical without formal manipulations' and here he may be seen to locate the artistic moment in the production of architectural form in a differential between architecture and 'critical' architecture – following the distinction between literature and literature of literary value (Eisenman 2006: 74).

Formal displacements, articulations and experimentations can be posited as critical in this regard, in that they do not assume that the condition of an architectural language is objectively given but rather constitutes a series of unarticulated repressions. The formal can be critical precisely because it operates on the borders of historical precedent.

**(Eisenman 2006: 74)**

In Eisenman's literary account, 'architecture' is distinguished from 'building' by a 'critical', 'transgressive' overcoming of the habitual grammar of function, structure or technique. This distinction is made through a judgement of intention – and this intention is judged with respect to knowledge of the critical formal essence, which constitutes the discipline. Here intention must be generated from a differential brought to the situation by the critical individual, unless it is the case that the individual is only a genetic expression of a pedigree outside of himself – which may then paradoxically be used transcendentally to legitimate their claim to genius or uniqueness. Thereby form is free and the architect is the site of the expression of the critical essence of the history of artful communications. This distinction is produced when the architectural language under consideration is understood not to be objective, externally 'given' but transgressively constructed from within the discipline.

There is no continuing direct line; there is rather a departure, a pushing away from the known point – a struggle. Any literary succession is first of all a struggle, a destruction of old values and a reconstruction of old elements.

**(Tynyanov quoted in Eichenbaum 1926)**

Eisenman maintains that 'the formal is potentially critical' when it participates in the invention – or reinvention – of disciplinary languages 'not simply for the sake of invention alone but as an analytical commentary on disciplinary precedents' (Eisenman 2006: 74). For Eisenman the artist has to demonstrate how his intention contributes to the construction of the disciplinary language rather than supporting processes of pure invention. Since the distinction of artfulness is subsequent to *and* inside of the productive distinction between the directly practical ('building') and artfully useless 'critical architecture', any *artistic* (forced) perception is one whereby the formal articulations undertaken by the artist-architect are made in reference to the history of the discipline – otherwise it becomes merely 'random'.

Here the primary distinction between artful and communicative is employed to reduce the problem to literary-ness from within general writing or language, but this then requires a secondary distinction in order to distinguish one literary form or form of literature from another – in this case using the more specific and problematic (relational) definition of forcing an intentional embodied affect in a reader. However, this choice of hierarchy for the distinction situates the individual perception within that of the discipline. This means that the individual perception which the artist 'forces' has value primarily for the artist and for the artist's discipline. This approach constitutes an explicit argument for hermeticism on the part of the literary formalists and Eisenman alike.

[...] one should not, without good cause, increase the number of influences upon literature, under the assumption that literature is the expression of society, nor should one confuse the history of literature with the history of morals and manners. These are entirely different things.

(Brunetiere quoted in Eichenbaum 1926)

Here the perceptions of difference, which define an artistic perception, are seen as operating from within the artist and his discipline – produced through his autonomy from society and his power to overcome its old values – rather than being constitutive of the artist *as well as* his world. This focus on the interior of the literary form leads to the assumption that the dynamics of its art are characterised by the 'repeated violations of established rules' (Shklovsky quoted in Eichenbaum 1926). Here an artful form is distinguished from the ordinary by the nature of the intention to form – for example the intention to excite or deceive rather than simply to tell. However, for this to construct a discipline, there is then necessarily a history of forms, expressions or 'formings' independent from general form, for example specific to architecture, against which these judgements must be made (the formal history of the discipline). However, not all formalists agreed that this was the way to proceed. Eichenbaum himself argued that the relationship between the artist and the audience should be understood as constitutive of the distinction of art, and this no-longer remains explicit if it is relegated behind the comfort of the original distinction between artistic or communicative expressions.

Neither a work fully motivated nor an art, which deliberately does away with motivation and exposes the structure, provides the most suitable material for the illumination of such theoretical problems. But the very existence of a work such as *Don Quixote*, with a deliberately exposed structure, confirms the relevance of these problems, confirms the fact that the problems need to be stated as problems, and confirms the fact that they are significant literary problems. Moreover, we were able to explain works of literature entirely in the light of these theoretical problems and principles, as Shklovsky did with *Tristram Shandy*.

(Eichenbaum 1926)

Building on the constitutive and generative understanding of the notion of 'perceptible form', marking an alternative 'problematic' approach, Eichenbaum argues that an exposing of problems is the founding principle of the formalists, and the relational character of the concept of a forced perception of form is not only an explicit feature of the theory but is in fact sufficient entirely to explain literary works in its own right. However, despite Eichenbaum's call to arms, it seems the main purpose of the literary formalism is not to delve into these uncharted problems of creation for the production of new literature(s) but to define specific disciplinary practices in order to articulate a literary discipline. Formalist epistemologies, which operate in such a way (with a primary disciplinary distinction and then a secondary artistic distinction) may be characterised in Deleuzian terms as 'axiomatic', because the definition of the problem is produced in relation to the intellectual predicates (the formal history of representations) of the system (e.g. X is equal to Y) when the substance of the problem is not actually causally related to these predicates (e.g. the force of an object upon me). Deleuze emphasises the importance of approaches that attempt to confront the problem, describing an alternative method of 'problematics' (Smith 2006: 154), a term he uses to describe the analytical method implied by the embodied epistemology I have explicated in chapter one.<sup>89</sup> However, the decision to promote an axiomatic formalism rather than a problematic one appears to be an historical feature of the development of formalisms in general.

Isabelle Stengers provides a historical account which argues that axiomatic formalisations are a natural but inadequate stage of development in disciplinary knowledge, a response to the recognition of the growth of the

particular (professional) powers of a discipline to construct definitions. Recognising these powers but choosing an axiomatic path occurs because, whilst a formal correlation between a physical system and a formal description must be sufficient, an absolute correlation is not necessary since what is sought is a productive definition within the social (professional) terms of a discipline, not a confrontation with the problem itself (Stengers 2010: 114). For example, for her, the development of formalisations in mathematics may be traced to a moment in its history when a social or internal legitimisation of mathematical analysis of physical systems granted the mathematician the 'ability to define the problem where previously she had to confront a problem' (Stengers 2010: 114). Eisenman's formalism might be assumed therefore to arrive in architecture at a point when the discipline feels able to begin to define its problems instead of having continually to confront them. When he argues that architecture has always looked to the outside but never properly interrogated itself, he proposes a formalism based on the use of the architectural 'diagram' to examine the latent potential of the discipline. However, in so doing he appears to eschew the problematic definition of perceptible form (which Eichenbaum already understood as more expansive potential for the concept) for a more axiomatic understanding of the Critical, which seeks to 'open itself' to its 'own discourse':

Architecture is traditionally concerned with external phenomena: politics, social conditions, cultural values, and the like. Rarely has it theoretically examined its own discourse, its interiority. My work concerns the possibility that architecture can manifest itself, manifest its own interiority in a realised building. The diagram is part of a process that intends to open architecture to its own discourse, to its own rhetoric and thus to potential tropes which are latent within it.

**(Eisenman 1999: 37)**



While it is clear that in order to construct a 'good' axiomatic formalism it is important to draw precise boundaries between 'the discipline' and 'the everyday',<sup>90</sup> Eisenman has to go further than the linguistic formalists to address the paradox between sufficient and necessary, because he finds the paradigm of literary distinction immediately – doubly – problematic in architecture. His first problem is that he has to account for the role of signs in the reading of artistic significance while finding a way of putting the content of architecture in the background of the analysis (a content which he argues is much more intrusive because it is not merely symbolic but material). His second problem is that he also has to find a way of arguing that the artistic architectural experiences which literary architecture produces are not imaginary but visceral.

### The significance of motivation

When a column becomes articulated, such as when it is made into a classical column [...] or when it is made too large or small for its function [...] a motivation is placed in the column outside of its structuring or internal motivation [...]. There are therefore, two types of motivation – one internal and the other one external. Both are motivated differently, one by an internal logic and the other by an external desire.

Thus columns or walls are rarely read initially as signs but more likely as integers of construction. It is not clear in this context whether lay people read them at all, either as construction or signs of construction [...] architecture is viewed by an essentially distracted observer.

**(Eisenman 1999: 212/65)**

In Eisenman's linguistic distinction of architectural significance, an architectural object such as 'a column' is problematic because it is not only a

symbol or icon of a column but also a column in-fact. Eisenman claims that artistic-architecture produces a writing of some kind, but using physical objects – not just symbols – and those objects are already, previously, partially determined in terms of a set of physical material relations, which are apparent to even an ordinary observer as something which precedes any linguistic notion of a 'sign'. Here, Eisenman's application of the literary formalist method to architecture reveals an assumption that is natural to studies of language but forced and metaphorical when applied outside of that subject, namely - that architecture is read or written like a language. For Evans this is particularly misleading because 'a great-deal in architecture may be language-like, without being language' leading him to argue that Eisenman's 'architecture is not like language', but more like 'the study of language' (Evans 1997: 126).

The difference is considerable. Language written or spoken is replete with manifest sense; the structuralist account of language is emptied of it. An architecture modelled on structuralism, empty of manifest sense would not be like language at all.

(Evans 1997: 126)

In Evans' view, the whole project of constructing for architecture a formalism based on structuralist linguistics suffers the crippling problem of being unable to account for sense-making. By defining his project as focused on a discourse *within* the discipline, Eisenman has removed any potential relationship with a perceiving audience. Eisenman is also not at all sure that an ordinary observer will ever be able to see beyond habit to perceive (architectural) form, but this observation only serves to prescribe a solipsistic audience which already knows how to read - forced - form. Without a perceiving audience it is difficult to achieve the status of artistry in a discipline if this ability – as the literary formalists insist – is what marks out

the artistry of the discipline. While this is a specific problem for Eisenman's formulation – as it is he who raises this extra-special difficulty for the construction of an architectural-linguistic formalism – it is also a general difficulty for the semiological extension of systems of analysis of linguistic signs to more material relations.

For example, for Barthes, using language as a basis for understanding more material relations as sign systems is especially problematic as it may be seen to impose a hierarchy between the audience and performer. The construction of such a disciplinary language is therefore, in Barthes' view, a deliberately exclusive production, 'founded in artificial fashion by a unilateral decision', and is elaborated not by the 'speaking mass' but by 'a deciding group' where 'the user follows these languages, draws messages (or 'speech') from them but has no part in their elaboration' and this process places the 'deciding group [...] at the origin of the system (and of its changes)' (Barthes 1964: I.2.6 p9). In this account the audience may be assumed to have little role in developing or speaking this architectural 'logo-technique' and Eisenman's distracted observer is not passive by virtue of his laziness, inadequate intellect, or ignorance but through not being addressed by the communication - categorically unable to participate. This means that the sense made through the communication of *architectural* language cannot be in any way common or shared outside the discipline – because, crucially, the outside of the discipline is not the audience for the forcings of perception which allow it to be judged 'artistic' or 'literary'. Eisenman's structuralist linguistic definition leads him to alienate himself from observers of architecture who are outside the 'logo-technique' of his disciplinary construction.

In his account of form, following the literary formalists, form had been made to contain all sense – to include all content. But now all sense that cannot be

made within the discipline, and within a linguistic definition of the discipline, is excluded from *architectural* form. This is the meaning of Evans' critique. Eisenman treats architecture as a species of literary criticism with the audience being critics of literature - rather than using the techniques of literary criticism to analyse the manner in which architectural literature may achieve impact on its readers.

The paradox of the combination of these conceptual distinctions is that whilst all form is to be understood as an embodied, affective relationship, the discernment of architectural form from other form is merely a mental activity of reading, performed by someone who can already read architecture in terms of a syntax and grammar created specifically by and for the discipline. Eisenman may therefore be said to construct a real distinction in the production of form for an audience – the forcing of perception – but defines that audience using only nominative distinctions – 'a formal discourse within the discipline'. Hence the crucial distinction that Eisenman finds he must produce in order to make a linguistic formalism specific to architecture. He must articulate a difference between architectural signs and literary ones, while enabling form to remain immanent between artist and audience. To do so he attempts to divide the relationships of sense into two types of motivation. This involves a complex hybridisation of the semiotic theory of Charles Peirce, referenced through the work of art critic Rosalind Krauss, and the critical theory of language of Jacques Derrida, often referred to as 'deconstruction' (and latterly through reference to diagrams and Deleuze).

Eisenman describes how an external motivation provided by the desiring architect makes the column an artful communication whilst an 'internal' motivation supplied by the logic of structuring presence makes the column an instrumental one. He argues that architectural signs such as the externally

and internally motivated column are both 'Icons' and 'Indexes', referencing Peirce's classifications of different types of signs, and argues that architectural signs are pre-motivated due to the pervasive nature of 'the metaphysics of presence', a concept he introduces through the work of Derrida. Eisenman complains that his formal architectural signs are completely dissociated from the conditions of real experience, but this is precisely what one might expect and his problem appears to be more a matter of the fact that the signs he is constructing in his formalism are unilaterally fabricated – 'really and truly arbitrary' (Barthes 1964: I.2.6 p9). By using the linguistic concept of 'motivation in signs' to describe the 'internal' motivation of the signs and symbols in an architectural language, his approach immediately diverges from traditional structuralist linguistic theories, which argue that language characterises a kind of pre-structuring of places. It is normally held to be the fact that these 'placings' are produced through the entirely relative nature of motivation, without which meaning would not be able to be constructed (or deconstructed) (Thibault 1997).

In Thibault's reading of Saussure, the origin of a sign is ontologically arbitrary – that is, any sound or word could be associated with any concept or object. Structuralist linguistic theory holds that there is no intrinsic relation between sign and object; signs are consensually or conventionally defined. However, in this account a sign is not arbitrary in its use, in fact it only has value in terms of its relation to other signs, in terms of its distinctness from other signs. Saussure argues that a-priori signs are arbitrary and a-posteriori signs are motivated (Thibault 1997: 184). In Thibault's analysis, whilst the signifiers of indexical and iconic signs may be seen as more or less motivated by referential signifieds than in the more conventional symbolic signs (where the signified may be seen as being defined to a much lesser extent by the signifier) all such constraints or motivations are produced through the process of use and are in no way 'intrinsic'. For example, an index could be

seen as the bubble in the spirit level whereas an icon could be seen to be a mathematical symbol such as 'c'. The way a spirit 'Level' references the degree of slope against the gravitational field could be argued to be more 'motivated' than the concept 'the speed of light' - as represented by 'c' in the formula  $E=mc^2$  - but both relationships are constructed by the repetition of arbitrary associations. If any distinction between these motivating circumstances can be made then it could not be considered a feature of language as such but rather of a further relationship between language and the world of and in which language seeks to make sense. Thus, Eisenman's approach requires either sense be included in the account or the concept of motivation dispensed with.

In this understanding, it is the externality of signs which makes them relative and this relativity that enables them to be produced in the first place. From the perspective of structuralist linguistics then, it is difficult to see precisely where the 'inside' of Eisenman's architectural-linguistic motivation might be located, but when the question of the construction of language is introduced and the generation of signs and systems of signs over time is considered, the situation becomes even more complex.

### A third language

Saussure distinguishes between the 'actual' and 'virtual' dimensions of langue. Langue is 'actual' when it is instantiated in and through the practices of parole. The former is always immanent to the latter. Langue also has a 'virtual' dimension [...] the social-semiological conventions and resources of language are distributed across some socially defined 'ensemble of individuals', irrespective of whether an individual in that ensemble uses them or not in any given moment [...]. In this sense, language is virtual because it exists as a set of capacities, dispositions and expectations which are only discontinuously realised

by any given individual when he or she engages in jointly constructed acts of parole.

(Thibault 1997: 123)

Thibault argues that Saussure makes a distinction between *langue* as a virtual phenomenon and *parole* as an actual phenomenon (virtual and actual are terms Saussure himself uses<sup>91</sup>). While both are real, *langue* is not an organisation of individual words or sentences and cannot be reduced to them; it is instead composed of the relations between such individuals. *Langue* is only ever instantiated in acts of parole. However, individuals in parole draw upon the resources of *langue*. 'Langue does not exist without the individual; yet does not depend on him but on the collectivity' (Saussure quoted in Thibault 1997). In this case, *langue* and *parole* are often understood in terms of diachrony and synchrony, in terms of what has come before and changed over time and what is a present occurrence of that system. This notion of before and after is a pragmatic distinction, which enables language to be frozen in time and studied as an object<sup>92</sup> (Matthews 2003: ch4).

Deleuze goes further than even Thibault's modern version of Saussure's account of language as a system of differences. In Deleuze's analysis, the sign is not an object of interpretation or something that may be formalised but a mere predicate of the substance of expression, which is sense. Here *langue* and *parole* are both simultaneously immanent to sense rather than either one coming before or after; rather than being abstract, both are actual characteristics of embodied expressions. What need to be properly understood as abstract (i.e. formless) are the pragmatics of power which operate through the auspices of these expressions – not the form of *langue*

or the form of parole but the formless power of the collectivity of utterances.

Language does not have signs at its disposal, but acquires them by creating them when a language<sub>1</sub> acts within a language<sub>2</sub> so as to produce within it a language<sub>3</sub>, an unheard of and almost foreign language.

(Deleuze 1998: 98)

For Deleuze, what is actually expressed has an essential, intuitive or diagrammatic relation with what expresses itself (the virtual, collective power called language) but does not resemble the actual expression (the speaking subjects individual expression – language<sub>1</sub>). Sense in turn is an intuitive attribution, an active understanding of the real, actual, affective capabilities between bodies (Langue-sense – language<sub>2</sub>), the exercising of which is produced in the properties of the serial acts of communicative expression (Language<sub>3</sub>). The process of making sense is not inherent in either *langue* or *parole*, rather both are expressive of and constitute it. The understanding of an expression as a serial, interactive system is key to the concept of embodied sense.

[...] 'what is expressed' has no existence outside its expression, yet bears no resemblance to it, but relates *essentially* to what expresses itself as distinct from the expression itself [...] What is expressed is *sense*: deeper than the relation of causality, deeper than the relations of representation.

(Deleuze 1992: 333-5)



In this Deleuzian account of language there is a shift: langue and parole may be understood as the *actual* form of content of the expression and form of expression and there are also real but formless – *virtual* – relations between these local, relative and absolutely sited capacities and properties. Structuralist linguistics' diachronic and synchronic division of the 'virtual' and 'actual' forms of langue and parole are now instead understood as two actual forms: the form of content and the form of expression - whilst the virtual aspect of language is a third element that may only be intuited through the forms in which it is expressed. It might therefore appear to be possible to recuperate Eisenman's idea of 'Motivation' as an embodied process of making sense. However, such a process of sense making is *inherent* only in the literal sense of it being actually embodied, and it is here that the relations of affect, which constitute it, are found to be entirely external to their terms. This is the meaning of affect being relational and embodied: it is in relation to other bodies, bodies that are externally related in actual, causal relation rather than associated through mental representations.

In these Spinozist terms the substance of language is doubly articulated as extensive and intensive modes – langue and parole – which express the power of the written and verbal expressions which constitute it. In the structuralist account of linguistics the parallel, simultaneous actuality of contents and forms of expressions appears to be acknowledged, but actually reduces the virtual, intuitive aspect of the knowledge of language merely to the imagination. In Deleuze's account both actual *and* virtual are instead real: power may be immaterial, but it is definitively real. Whilst langue and parole may be understood in terms of the specific powers they enable and produce, knowledge of the power of 'language' in an abstract understanding may only be intuitively sensed, as these powers have no form beyond the expressions that imply and suggest them. For Deleuze this returns to a time

before the 'structuralist turn' in order to 'reunite linguistics and literature' (Lecerle 2002: 65).

When the virtual power of language is seen not as the informal power of the collectivity but as an actual form of organisation of representations, the effect is two-fold. Firstly the form of language is understood to be much more determining than it actually is, which leads to the drive to produce a formalism expected to provide all the solutions to the problem (axiomatic). Secondly, it leads to the separation of the properties and capabilities of linguistic communication and their assignment to different places in time rather than as simultaneous phenomena. Whilst I have briefly argued via Deleuze that this is of great political concern because it has the effect of relegating difference to a category of error, it is certainly of great practical concern for the construction of any architectural epistemology of form-making, because an explanation that cannot account for the capabilities of a system to generate change – in terms of the production of artistic affects in an audience or the distinction of what is and is not part of the discipline that produces those affects – is useless for describing the creative processes of architecture.

In his construction of an architectural formalism using linguistic principles, Eisenman appears to follow the explicit, hermetic, disciplinary approach of the literary formalists, using the constitutive notion of forced perception as an axiomatic distinction between inside and outside of the discipline, rather than a 'generative' problematic one that constitutes the discipline and its outside. In addition, when attempting to apply these principles to architecture, he institutes a further hierarchical shift in order to distinguish architecture from literature. Eisenman's first distinction between building/architecture is made on the basis of artful rather than instrumental communication. It does not enable specific distinctions to be made in the

production and analysis of particular works, but serves to delineate the boundary of the discipline as one concerned with the formal affects of an architectural construction – rather than the practical affects. The second critical distinction enables the discipline to judge artistic perceptions by making the substance of the language in which they must distinguish themselves also *the language of* the discipline. This secondary distinction coincides with the definition of architectural form as a formal language of signs, grammars and syntax, which also reduces the potentially problematic understanding of the forced perception of form to one of axiomatic communication to an audience that is only the audience of architecture, or architectural culture.

In attempting to construct a new architectural structuralism to explain the difficulties of motivation that Eisenman finds in the fact that 'Architecture' does not actually appear to be language-like, Eisenman makes a further inadequate distinction. The critical distinction of disciplinary audience is reiterated in a way which limits the source of architectural content to a transgression of pre-existing catalogues. Ultimately, positing motivation in the context of a synchronic and diachronic understanding, Eisenman makes form immanent with content on the basis of a secondary, axiomatic distinction rather than a constitutive, problematic one. For him, Form of content may only be implied within a Form of expression, and this enforces a disciplinary specific – introverted – perspective both bounded in space and in time.

## 2 Critical histories

It is logical that the question criticism poses to that which we can no longer name architecture but rather a general organisation of building processes, must be the same one it asks itself; that is, in which way does criticism enter into the production processes?

(Tafuri 1974: 313)

### Historical and individual indifference

One of the most confusing aspects of Eisenman's writing is that he implicitly presumes as given that the discipline of architecture is circumscribed by an axiomatic formalism and that the critical is defined as autonomy produced primarily within disciplinary practice. His theoretical assumption is that external engagement is unnecessary and undesirable because, in lying outside of the discipline, it does not contribute to a disciplinary definition of form. Eisenman's convenient division of history into past and present mirrors his notion of intrinsic or extrinsic motivation, and both concepts are used to present a notion of the real that has only a current and present form of expression – leaving 'non-architectural' content as a historicist formation which lies 'in the background'. Consequently, Eisenman describes a history of architecture defined by two distinct critical projects – one of autonomy through an insistence on the primacy of history (by which he refers to the approach of Manfredo Tafuri) and the other with the primacy of language (by which he means himself) – and in so doing he appears to think of the history of architecture in terms of the structuralist linguist understanding of separate diachronic and synchronic perspectives (Eisenman 2000). This sees Eisenman arguing that Tafuri is proffering a critical formalism of architectural history, in contrast to his own claims to seek one of specific, present

disciplinary practices. Thus he feels able to argue that he is producing critical architectural practices, because the critical present moment of creative, autonomous form-making that forces a perception, even in a distracted observer, is assumed to be produced through (architectural) form.

The real problem is to how to project a criticism capable of constantly putting itself into crisis by putting into crisis the real. The real, mind you, and not merely its individual sections.

(Tafuri 1987: XX)

Tafuri, however, struggles to see both how the 'real of history' in Eisenman's Derridean approach may be defined from a perspective where it is constituted by 'individual sections' of difference. For him, the coherence of an account of 'history' - a sense of totality in the face of the plurality of histories through which it is constructed - is a more fundamental problem. He worries that by practising 'the institution of differences and disseminations' one runs the risk of actually encountering 'annihilation'.<sup>93</sup> This, he argues, is inherent to the historical problem of epistemology, or rather to the inability of epistemologies, essential or empirical, to account for historical processes *and* creative futures (14). He states that history is both determined and determining, and that interpretative meaning is always a positing of a meaning in relation to something external rather than an uncovering of meaning from within. He sees history itself as a production – 'a forming' – that involves 'a highly non-linear interaction of diverse techniques of domination, each of which possesses its own untranslatable language' (5). Tafuri offers a positive project as one that questions the 'thresholds that provide density' and 'the points of impact that determine the interaction of signifying practices with power practices endowed with their own specific techniques' and argues that form is a kind of threshold or boundary amidst a territorial battle in space (8). The distinction between Tafuri and Eisenman is

therefore not, as Eisenman argues, between asserting architecture as a specific disciplinary field of form production or opening it up to be a specific discipline of the production of form; it resides in a wider sense of whether either of these distinctions is made in relation to a specific history of the discipline, as Eisenman intends, or in a view of historical processes as Tafuri believes it should.

The construction of a disciplinary specific formalism makes explicit a set of activities that may be considered 'Architecture' and as such is positive through its disavowal of discussions that assert 'architecture's' authenticity through essences of function, divinity or ideology. However, these discarded discourses also partially address the power and meaning of architecture's relationship with society, and Eisenman's paradoxically exclusive immanence may only be considered productive in a Deleuzian 'diagrammatic' sense, when the notion of autonomy is problematised by a continual assertion of the reality of the power that generates it. Eisenman attempts to overcome his production of an indifference between individual creativity and social constructions of culture by a subsumption of history within disciplinary form. However, in so doing he acts to produce an immanence of forms of expression that fails to encompass the role of history beyond what is written into the disciplinary catalogue. I will now examine in finer detail the approaches of Eisenman and Deleuze to the relationship between the internal 'motivations' of content and the 'external' expressions of the desire of the architect, through examining the interpretation and responses of Derrida and Deleuze to the concept of 'the metaphysics of presence'.

## Metaphysical simulations

The problem with this idea of the diagram as matter, as flows and forces, is that it is indifferent to the relationship between the diagram

and architecture's interiority and in particular to three conditions unique to architecture: 1 architecture's compliance with the metaphysics of presence; 2 the already motivated condition of the sign in architecture; 3 the necessary relationship of architecture to a desiring subject.

(Eisenman 1999: 33)

Jacques Derrida describes 'the metaphysics of presence' as 'the constant, profound and potent prioritising of that which is thought simple, intact, normal, pure, standard, self-identical, in order to begin to think derivation, complication, deterioration, and accident' (Derrida 1977: 93). According to Carol White,<sup>94</sup> Derrida uses Heidegger to produce a critique of Platonism and its particular approach to the idea of time, which utterly privileges the present moment or object as the sole arbiter of reality. Deleuze's critique explains how representational illusions have flattened the concept of time to a principle of identity (Deleuze 1994). Both philosophers address the notion that traditional Western philosophy has consistently privileged that which *is*, or that which appears, whilst failing to pay enough attention to the conditions for that appearance.

All three – Deleuze, Foucault and Derrida – recognized that thought had become immobile. Thought could not move because 'Platonism' – that is, any meta-physics of the transcendent – conceived thought as returning at the end to an idea that had already been present at the beginning. Thought was caught between a beginning and an end. Thus in the Sixties a need is felt to liberate thought by re-conceiving history without end and without origin.

(Lawlor 2003: 127)

Leonard Lawlor argues that whilst they share a common project of overturning Platonism by conceiving differently of time and history, between Deleuze and Derrida there are also four divergent trajectories of thought: 'destruction versus deconstruction; purity versus contamination; fiction understood as virtual image versus fiction understood as the trace; and intuition versus language. The first term of each couple represents Deleuze's position, the second that of Derrida.' (Lawlor 2003: 9). For Lawlor these divergences are very small differences, and ultimately the judgment he makes between them is that Deleuze is more immanent (Lawlor 2003: 3-9). However, he says we may finally distinguish Deleuze and Derrida at the point where their four divergent trajectories are located – in their distinctly different approaches to the concept of simulacrum in Plato's famous triadic ontology of Model, Copy, and Simulacrum, or Father, Daughter and Suitor (Lawlor 2003: 3-9).

In substantial agreement with Deleuze,<sup>95</sup> Derrida argues that in Platonism, difference is ultimately founded on the same – a principle of identity. Derrida and Deleuze diverge, however, in the method by which they attempt to move beyond this problem. For Derrida, the father in this triad is 'pure heterogeneity' and the simulacra remain negative, simple repetitions of 'the same', a perfect indistinguishable double.<sup>96</sup> In contrast, Deleuze's simulacra are understood as difference-in-itself. When Deleuze says the simulacrum 'is not more or less at the same time, but becomes more or less at the same time', he is emphasising the parallelism of Spinoza, making it clear that this is the double movement of expression that the simulacrum or affect is constitutive of and is constituted by. The simulacra here are embodied conditions of difference between bodies – affects. For Derrida, the simulacra are '**contaminants**', whereas for Deleuze they are '**pure**' difference (Lawlor 2003: 128). Simulacra, seen as pure difference, produce all phenomena classifiable as copies or models. For Deleuze, whilst the copy is an image



endowed with resemblance, the simulacrum is an image *without resemblance*. For example: Man was made in God's image and lost *resemblance* through sin whilst retaining the image.<sup>97</sup> Deleuze's simulacrum 'lives from difference' and, since it is not based on resemblance, it has 'internalised a dissimilarity' (Deleuze quoted in Lawlor 2003: 128). Deleuze sees the differential of the simulacrum as a positive, **virtual force**, whereas for Derrida it is **a trace** of the other – evidence of contamination. Deleuze therefore insists that the simulacrum is a major part of being itself, saying 'something living is more a simulacrum than a thing' (Lawlor 2003: 172).

For Deleuze, the denial of this power of the simulacra is the denial of the conditions of the appearance of reality, described by Derrida as 'the meta-physics of presence'. The Derridean perspective takes a pessimistic view, that since we are within a system of language, since we are forced to express ourselves through language, then our discussion of the simulacrum has to be conducted as if it were other, from the outside. In contrast, Deleuze takes an optimistic view, that language is only one of the many forms of expression which constitute our being and despite the limits it produces, our knowledge of being transcends these limits – hence '**intuition**' over '**language**'. For Derrida, the meta-physics of presence must be continually 'deconstructed' in order to access an understanding of the conditions of appearance, but due to the introverted perspective this is a process designed to enable critical intervention 'within an existing field of hierarchical oppositions (speech/writing form/function)' (Derrida 1982: 195). Ultimately, Deleuze says 'we have become simulacra' and argues that the simulacra are 'against the father' by aggression, subversion or insinuation: hence '**destruction**' rather than '**deconstruction**' (Deleuze 2003: 257). Derrida sees this from an introverted perspective of Being – an inside contaminated by the meta-physical presence that insinuates itself through the agency of the simulacrum, whereas Deleuze argues the external other is that which has

the power to dissolve the self, to be open to the creative and uncertain future that the simulacrum brings: hence '**extrovert**' over '**introvert**'.

Derrida's focus on language suits Eisenman's wish to emphasize the literary aspects of architectural compositions and performances, and also has obvious correspondences with the central distinction made by the Formalist project of literary criticism. The simulacra are the Platonic conceptual equivalent of the Formalist 'perception of difference' as an embodied act that actually constitutes the art. However, as with Derrida or Deleuze, the key distinction is in the choice between interpreting this as a fundamentally relational, differential definition of all formal construction or as an act of deconstruction within the existing system of language. Eisenman chooses to understand the critical perception of difference or intentional compositional act as an operation within an architectural language rather than an embodied process at once outside of and constitutive of any language, semiology or behaviour. The difference between Eisenman and Deleuze stems from these subtle differences in approach to the simulacra – between Eisenman following Derrida as 'a thinker of self-interrogation which the Other contaminates' versus 'Deleuze as a thinker of interrogation by the Other which dissolves the self' (Lawlor 2003: 9).

### Critically immanent

In Eisenman's architectural formalism, the distinction is made between transformational, 'critical' humans who can perceive difference (wall-ness, column-ness) and habitual, distracted humans who as yet cannot (potential architects and non-architects). For Eisenman, architectural signs are 'pre-motivated' through the habits of recognition and the nature of architecture's compliance with the general problem of the 'metaphysics of presence' by which these habitual readings are established. Eisenman's literary

architectural struggle is articulated as the overcoming of these practical internal motivations of the architectural sign and the discipline's ready compliance with these 'meta-physics of presence'. He claims that his 'critical' architectural interventions contribute to the 'deconstruction' of an immutable collective signification (produced through a habitual reading of the everyday), using the individual autonomy of the creative, authorial, desiring-subject of the architect. Eisenman specifically articulates his objection to a Deleuzian diagrammatic approach by arguing that he is unable to see how it could account for both historical processes (architecture's interiority and anteriority) and individual critical creative moments (diagrams) without dissolving or abstracting them – directly quoting Deleuze in a repost to the 'post-critical' position of Somol and Whiting. Eisenman's stated disagreement with Deleuze is fundamental, since it implies that Deleuze's epistemology is indifferent to the role of the past in constituting the present. This accusation of *indifference* between the individual case and the historical case is the same problem that Deleuze poses Spinoza and, as briefly set out in the previous sub-section 'Metaphysical simulations' the same worry that Tafuri expresses about the approach of *both* Eisenman and Deleuze.

However, for both Tafuri and Deleuze, the 'individual sections' of reality created in the forcings of perception, produced in observers by artistic forms, must be linked to external (historical) processes in order to produce an appreciation of true, objective reality. This notion of reality requires that a continual dialogue be established between the individual critical, autonomous moments and the culture and history from which they are seeking autonomy and in which they are articulating difference. Without this dialogue, any account of the production of sense does not make sense, cannot be logical. The shared problem for Tafuri, Deleuze and Eisenman is how to open dominant habitual practices to transformative critique –

opening up history to include all aspects of production – whilst ensuring that we maintain the ability to make critical distinctions about the present processes of production themselves.

Eisenman seeks to create an immanent system of architectural discourse, expanding architectural grammar to encompass all expressions of an architect, but to do so he has to institute an absolute exclusion, limiting his expansion to a set within history: the set of historical expressions of form judged architectural by architects concerned with such judgements. Deleuze instead uses the distinction itself as a foundation of a continual problematic. Here, the audience is potentially everyone, prior to a distinction being made, rather than the audience selected subsequent to the definition of the discipline. Affect must always be against any internal identity because it is the sensing of the external differential mechanism by which identities are constructed. The crucial distinction made by Deleuze and Tafuri is made with respect to the whole system of embodied sense rather than against a disciplinary language. This principle is absolutely key to the Critical label.

### 3 The desiring-subject of diagrams

#### Problems of forming

A topological surface is a condition of mapping without the necessary definition of distance [...]. The ground surface as a membrane which becomes a topological event/structure is also simultaneously the building form [...]. This groundless ground as realised at Rebstock is in the possibility of the fold.

**(Eisenman 1993: 25)**

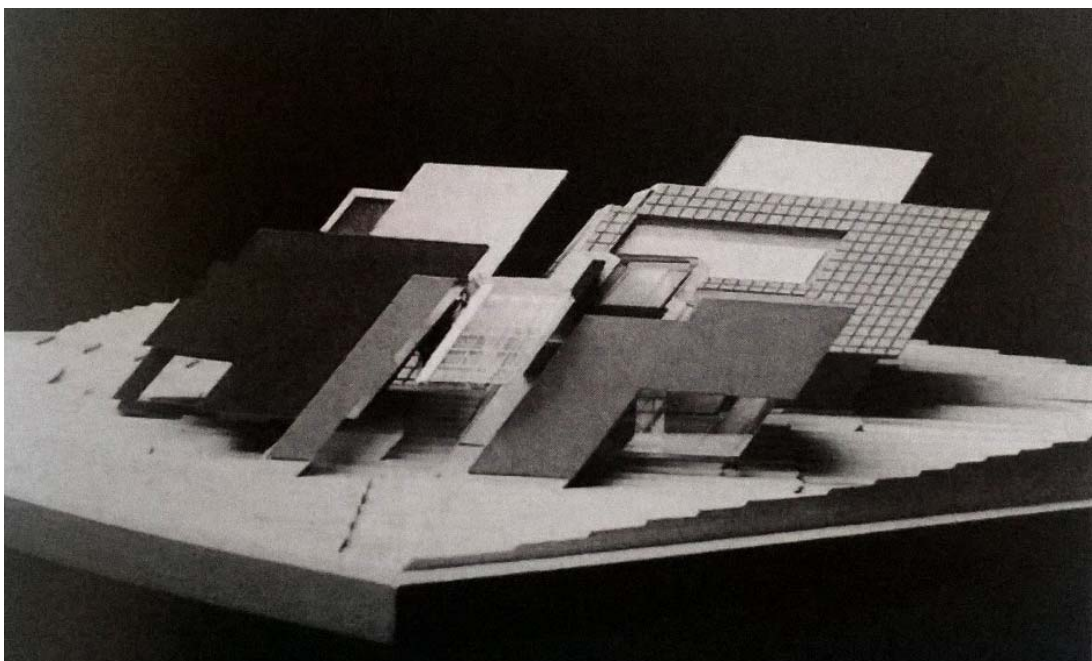
Eisenman discusses the site for his Rebstock park project in terms which are not unique to Deleuzian epistemology but are associated through him with a non-representational approach to geometry and space, especially in relation to the concept of 'the fold'. He proceeds to discuss the design and origin of the project in terms of a 'topological' approach to the 'ground' of the site. The concept of topology<sup>98</sup> is properly defined as a non-scalar co-ordinate system. In Eisenman's description this is explained as a metaphor for the way the ground surface is conceived 'as a membrane', but this is in turn described as able to be simultaneously a topological event or structure and the actual building form. Deleuze uses the concept of 'fold' to describe the relationship between a subjective interior and an objective exterior in a relational ontology of bodies (Deleuze 1993). However, in Eisenman's terms, the fold is described as an agency that characterises 'a continual variation of matter' (Lynn 1993: 26).

Eisenman describes the generation of a number of his projects as employing 'topological' geometry, but this is simply not – literally – true. For example, Evans argues that whilst Eisenman's description of House Xla (1980) claims to be composed using topological geometry (and the same may be said of Rebstock park), in fact 'the project is composed of the familiar metric elements in the familiar metric format' and actually uses 'ordinary' geometry in its drawing and in its building (Evans 1997: 130). Evans uses another example to explain what he means. In the final stages of the design of House X, a model was produced in which all the uprights were made to lean at 45 degrees in the same direction. As a full physical model, it appeared from certain angles to be an axonometric projection (see Figure 19 below). Evans points out that whilst this is a direct application of the mathematical term 'transformation', Eisenman suppresses this image of the model, and instead persists in using the term in a Chomskian sense<sup>99</sup>.

It is the only true transformation, in the mathematical sense of the word, that he has ever performed on his work. He does not call it a transformation, though, for the series of what he calls transformations for House X have already been produced [...]. The axonometric model provides an instance where it has been possible to identify a specific similarity between what Eisenman says he makes and what he makes, and it is symptomatic that the similarity was unremarked upon by him.

(Evans 1997: 132, 128)

The key point for Evans is that Eisenman clearly knows he is not actually using topological geometry but rather using such terminology to describe a formal process that he believes is made in relation to that concept. He takes this as evidence that Eisenman deliberately does not expect any logical or semantic relationship between his text and the formal productions with which it is associated, but Evans' project is concerned to ensure that such relations are made an explicit part of an epistemology of creativity, whereas Eisenman appears to prefer to obfuscate such facts.



**Figure 19\_**  
**House X**  
showing a model skewed at 45 degrees  
(Marcussen 2012)

In a similar vein to Evans, the architectural theorist Lars Marcussen cannot see the practical or theoretical connection between the visual method and the articulation of it. When examining the design procedures which Eisenman actually followed in which the sectional drawings from René Thom's work on catastrophe theory (Thom 1975) are used as formal drivers for the manipulation of the project forms he says 'in each case the number of divisions, that is, seven, corresponds to the number of sections in the butterfly, but apart from that, I cannot tell what the formalism that Eisenman is about to work out has to do with the butterfly catastrophe' (Marcussen 2008: 517). Marcussen concludes that, in fact, Eisenman performs these distortions on a conventional design that he himself prepared in order to subsequently produce a more complex - decorative - form: 'the Eisenman singularities and events are an ornamental drapery, a piece of scenery in the theatre of urban nomadism – and as such they are no doubt secured a place in the history of architecture on the line leading back to theatrical Romanticism' (Marcussen 2008: 519).

In responding to the brief, he goes from problems – which would seem to ask for solutions – to a problematisation, which involves the realization that certain problems cannot be resolved once and for all – they must become part of the creative process. This process is explicitly Deleuzian in recognizing that the undetermined relation between ideas must be expressed in architecture.

(Williams 2000: 204)

While Evans demonstrates that there is no literal or rational connection between Eisenman's textural description of his activities and the design processes in which he actually engages, the philosopher James Williams sees an entirely new method in Eisenman's ascription of processes of folding to the Rebstock project. In Eisenman's account, the use of a 'diagram' such as 'the fold' changes the habitual relationship between the architectural process and the figure-ground to allow it to be re-conceived as a 'groundless ground' – enabled by the idea of the fold – and elsewhere he argues that such transformations are what makes his work 'critical'. He asserts that this is a breaking of the habits of essentialism, which would always seek the reproduction of successful ground-figure relations from the past, and a breaking of the habits of environmental determinism, which would always tend to create isolated point blocks on tabula-rasa.

In Eisenman's narrative, an old epistemology would have encouraged the designer to view the space he was creating in terms of fore and back grounds defined by coordinate systems, whereas the topological concept allows him to see them as a continuum. In terms of the project this means the 'buildings' and the 'ground plane' have an ambiguous relation, considered as a variation in a single surface rather than distinct objects or planes, and this way of thinking leads to an unusual set of forms. It is clear that the use of topology in the project is not rationally literal but more directly related to this simple creative moment where the architect thinks differently about the process of creation and this produces forms which are not engendered through habitual enactments. Evans is also not concerned whether a 'truthful conversion' of thought into matter has or has not occurred, whether it is a transformation, a topology or a Mobius strip. Evans thinks it justification enough that the description or concept employed 'may initiate a chain of thought that leans towards architecture and as such provide a stimulus for the doing of something that would not otherwise be



done' (Evans 1997: 136). Unlike Marcussen, Evans seeks to penetrate the confusion which Eisenman's textural, theoretical formations produce whilst also recognising their value as creative instigations for what 'would not otherwise be done', acknowledging the potential that is identified by Williams.

It is obvious that the use of the fold could take on a literal physical 'translation', since the manipulations of forms might be thought of as folded planes – but of course this does not actually happen in the actual building process. The process of a literal folding of a plane is more plausibly suggested as a mechanism in the design process – and a series of conceptual drawings do indeed show how a standard ground plane of the site has been manipulated to produce the final forms (Lynn 1993: 26). It is in this manner that the map of the ground appears drawn as if it had been folded - to connect points that would have otherwise been distant - and these analogies of translation and transformation subsequently appear to have offered a subjective mechanism for consistency when producing the formal manipulations to create the actual physical shapes of the project - a mechanism for the production of a pattern which is used to affect surfaces and spaces in three dimensions. If Marcussen's practical analysis is correct but we then see the concept of the fold used as an artistic, literary notion rather than a pedantic, literal one, it may be seen that any actual 'folding' is found in the process by which the forms are produced by the architect - moments where what was done would otherwise not have been done - for example in 'projective' manipulations which may be imagined as having been produced by folding, or considered to produce the effect of folding (if it were possible for a viewer to associate such a concept with a built landscape). However, while the problematisation that Williams observes in Eisenman's process certainly does produce a creative challenge to architectural habit, it only appears to satisfy the requirements of one half of

a Deleuzian critique of the representational process of determining (architectural) ideas.

## Formal introductions

The external diagram provided a series of formal relationships and organisations that when given form, structure and function in an architectural context, did not permit these forms from being understood as coming from a known interiority – that is a sedimented relationship between form and function. Lastly, and perhaps of equal importance, these diagrams shifted focus of the reading strategy from its origin in formal relationships, and then linguistic and textual ones, to the possibilities of reading affective relationships in the somatic experience.

(Eisenman 1999: 209)

Rebstock Park is filed by Eisenman in Diagram Diaries as using both 'internal' and 'external' versions of the conceptual (diagrammatic) tools 'folding' and 'grafting' (Eisenman 1999: 238); he uses a similar approach on a number of other projects, not least the Berlin Memorial for the Murdered Jews of Europe (2005), and begins to talk about such concepts as if they were formal typologies – for example describing both his Max Reinhardt tower and Koolhaas' CCTV tower as 'Mobius'. Eisenman classifies these affects on the process as internal or external, which appears to mean that the forms of diagram – a chemical structure, a passage in Romeo and Juliet, a map of flight paths, asymmetry in Venetian villas – are taken from either 'within' or 'outside' architecture. The reading strategy' appears to be the mechanism by which the diagrams are utilised in formal production, and Eisenman describes how these have moved from his early House series, which looked at formal architectural compositional rules, to later ones, which used

concepts such as generative grammar and topology, and more recent ones still, which see the diagram (as a range of inputs including texts and drawings) structuring the affective relationship between the designer and the drawing in order to direct the production of the building form. Eisenman's external diagrams are forms that he finds which are not forms or drawings of buildings. His transgressions are the introduction of forms not previously considered specifically architectural, such as a shell (Galicia cultural centre), a map of air-flight corridors and the fabrication of an archaeological narrative (The Wexner Centre), a pattern of words in a text (Romeo and Juliet) or a DNA structure (Biocentrum). Eisenman insists that these forms are not then used as analogies (his explanation for the Biocentrum project's failure) but should instead be 'immanent' to the physical form – utilised diagrammatically as embodied sense objects in the process of design, not intellectually (e.g. even as dialogical analogues). This immanence means there is no narrative association between the form and its programme or function - which is precisely why Marcussen cannot see the connection - and the 'critical' architect is here producing a form that cannot be read as previously existing or being derived from those previously existing.

It is a representation of something in that it is not the thing itself. In this sense, it cannot help but be embodied [...]. The diagram is not only an explanation, as something that comes after, but it also acts as an intermediary in the process of generation of real space and time. As a generator there is not necessarily a one-to-one correspondence between the diagram and the resultant form [...] it is rarely an explicit form.

**(Eisenman 1999: 27-8)**

This immanent, embodied application of the diagram is posited as not just any creative process, but the moment when the architect overcomes the habitual tendencies in this intimate relationship of subjective desire where he usually resorts to the habits of functionalism or intellectual analogy. Eisenman uses 'the diagram' as an intermediary that disrupts or dissimulates the relationship between the tendency to be habitual and representational and the ability to be open to indeterminate and unexpected outcomes. This for Eisenman is where the 'critical' nature of artistic processes ultimately lie. This embodied and intuitive use of formal interventions in a design process to challenge design assumptions through drawing has obvious parallels to Hill's concept of 'drawing forth ideas' and Evans notion of 'projective relations'. The contention arises however, not in what he does but what he says about it and what he claims for it. In some senses, it seems a very straightforward process which would share concerns with a number of creative techniques used across a range of artistic disciplines to employ the power of embodied 'unconscious' processes without such a need for theoretical justification. In the formalist vein explored here however, these formal manipulations are the mechanism by which he creates form, and therefore (in a very reductive leap) the mechanism by which critical form can be produced, taken in this analysis to simply mean form which would 'not otherwise' have been made.

Eisenman articulates the architectural drawing process as one that is polluted by rational discourse and must not suffer the reduction of analytical thought that has not first been displaced by being dissimulated or deconstructed – so that the habitual is not simply repeated by the compliant architect. He argues for the importance of a kind of activity or knowledge in the process of architecture that produces form through compositions of form – through the making of form without a reduction to rationale. He marks out his enemy as rationalism or functionalism, as the repression of the

power of the process of drawing. The immanence found in Eisenman is therefore a non-intellectual association between the formal mechanisms of the design and the formal appearance of the building. On the other hand, the discursive, articulable element of content is first separated out and then becomes understood as a separate form of expression – in his case in the form of writing. It is here that any political, moral, historical or ethical discourse associated with his work is held as an almost entirely separate textual form of expression, which is independently used to affect a theoretical prowess and establish a pedigree for his morphological experiments. Eisenman, like Evans understands the relationship between architect and drawing to be a projective, affective one, but he sees the challenge being a psychological process of making this explicit to the habitual architect as part of the habitual discipline. He seeks to make sense, but first and foremost to himself.

### Somatic evolution

PE: 'Every time I go to an interview I always say, "we will give you a unique signature." That is what clients want to hear, and how you get selected. Or we say something like, "We will give you an icon." You can't be saying, "We are going to give you a non-icon," because that's not what they want.'

**(Eisenman and Koolhaas 2010: 36)**

Eisenman has constructed a version of the profession whereby defining a disciplinary boundary and establishing criteria for the construction of formal innovation is what enables the creation of a built oeuvre of formal practices that might convince a client that the architect will be able to meet the requirement of cultural 'icon'. The argument of Hays and Eisenman against the Tafurian expectation that a critical architecture would also be self-critical,

is that this would be considered a *non*-iconic, anti-pragmatic account of the practices of the architect. It would not serve to create the power to give clients exactly what they want – which at the same time must be the site of the architect's culturally autonomous critique – in order to create great works of art and architecture such as Eisenman's collaboration with Richard Serra on the Holocaust Memorial site in Berlin. He insists that the judgement of what is a critical, literary architectural moment may only be made through the frame of the discipline, and that these literary moments in the literature of architecture are only political by implication, only critical by-the-way, since form is understood as content and any instrumental content or motivation is deliberately left in the background because it gets in the way of our creative autonomy. It is critique limited to what may be articulated in built form, and the architect is a critic offering merely a trace of hope that architecture might be able to contribute to social and political discourse. However, Eisenman's insistence on a real distinction of expressive form remains a radical departure from traditional accounts, and leads to the architectural drawing receiving a much fairer assessment of its value. This opening up of the architect to external bodies in the form of flight paths or archaeological narratives has produced a dramatic reinvigoration of the account of the discipline, as well as enabling the production of exciting and challenging works of architecture.

While the difference between the ground plane and the top plane of the pillars may appear random and arbitrary, a matter of pure expressions, this is not the case. Each plane is determined by the intersections of the voids in the pillar grid and the gridlines of the larger site context of Berlin. In effect a slippage occurs in the grid structure, causing indeterminate spaces to develop within the seemingly rigid order of the monument. These spaces condense, narrow, and deepen to provide a multilayered experience from any point in the gridded field. The agitation of the field shatters any

notions of absolute axuality and instead reveals an omi-directional reality. The illusion of order and security in the internal grid and the frame of the street grid are thus destroyed.

[Eisenman 2005]

[...] the grid simultaneously, and strangely, produces an escalating sense of claustrophobia. Perhaps it is a consequence of the sloping site but you can't shake the feeling of getting more and more lost the deeper into the grid you walk. As the stelae get taller and the fragments of familiar Berlin landmarks disappear from the periphery the sense of being trapped that Eisenman intended to evoke begins to emerge.

[Downing 2005]

Deleuze argues that it is possible to recognise the dominant paradigm and choose to act to reverse it from its own inside by deciding at every opportunity to prioritise that which is different and only subsequently arrive at identifications. Eisenman's project for an immanent account of architectural production fails to complete this task, because it only considers *disciplinary* forms of expression, and only from the perspective of the present moment *or* as an historical catalogue whilst operating under the patronage of a client. However, by acknowledging a return to 'the somatic experience' as 'a necessary and critical evolution' in his work, Eisenman opens the potential for engagement with bodies of difference which further increase his capacity. The collaboration with Richard Serra and the intense political context of the Berlin Memorial to the Murdered Jews of Europe have without any irony provided a superlative opportunity to create critical form in which the content is not left in the background but is precisely what charges every aspect of the embodied engagement of the users with the form. Here the form supports and enables the content by allowing the

memorial to blend at its edges with city life unconscious of its symbolic meaning as well as with users who understand and appreciate that meaning on an intellectual level but do not interpret that to determine an appropriate set of behaviours in the same way as the municipal client. The critical form assists the users in themselves being creative in a similar way that Hill suggests the Kunsthall operates, but in this context they are able to be creative through their interpretation of physical engagement which is also charged with producing a socio-political interpretation of historical events. However, Eisenman continues to appear to deny any power or intention in this regard.



Figure 20\_  
Regulations for visitors to the Berlin Memorial to the Murdered Jews  
of Europe





**Figure 21\_**  
**Visitors to the Berlin Memorial to the Murdered Jews of Europe**



**Figure 22\_**  
**The Berlin Memorial to the Murdered Jews of Europe blending at the edge into City life**

There is an explicit and consistent thread to Eisenman's discursive argumentation, but one that has as its starting point a jarring assumption, (which Eisenman takes absolutely for granted): that the discussion he undertakes is entirely limited to the formal devices and mechanisms occurring *within* the architect's creative process. He articulates a 'critical' practice through the creation of 'what would otherwise *not* have been done' (the creative power that Evans' analysis grants this notion of critical), consistently arguing for the value of projective, differential relationships between the architect and the drawing rather than what he sees as nominative, descriptive or literal distinctions – e.g. 'false origins', 'zeitgeists', 'function'. In so doing he argues that the architectural drawing and its associated processes be valued as affective, embodied relationships between the architect and his products and, in this regard, Eisenman's analysis is in strong agreement with both Evans and Deleuze. However, by constructing consistency through an internal, circular and self-referential

system, he may be seen to perform a typical process of 'infinite regression', which occurs whenever a representational epistemology attempts to extend the boundaries of one or other dualist perspective to encompass the other and explain the location of its essences – resorting either to God or Chaos.<sup>100</sup> Eisenman explicitly follows a hermetic, disciplinary account of these expressive productions in order subsequently to articulate a series of distinctions of practice, which ultimately serve to construct a cultural elite within which he seeks to advance his own status. The purpose of Eisenman's form of expression is to provoke the user by disturbing the creator (himself), the purpose of his theoretical construction is to create an authorial identity through which he may be granted the power to do so. Until now, Eisenman's account has not attempted to address or analyse the actual embodied affect of his practice.

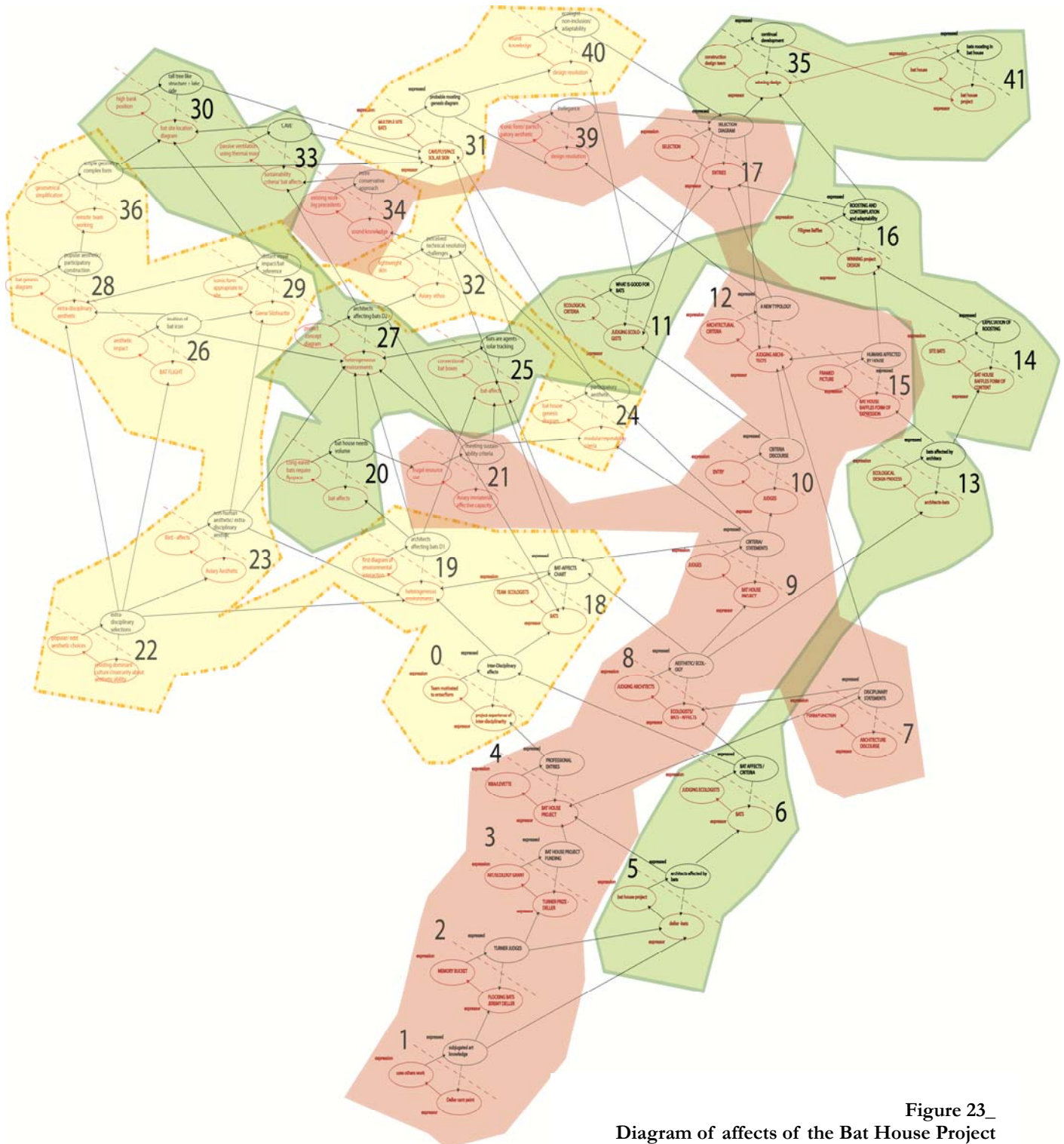
The notion of a set of disciplinary forms of expression making sense is anathema to a Deleuzian epistemology for architecture without there also being articulated a disciplinary set of contents. The desiring subject to which Deleuze's diagram is indifferent is one that seeks to remove or avoid sense; that is unable to account for the concrete and embodied nature of creativity; that reduces epistemology to an account of elite languages and that consequently, holds the creative or critical moment to be innate, essential or individual. Eisenman's account of the immanence of the relationship between the architect and his internal productions does implicitly acknowledge the dual-form nature of form. On the one hand, his account seeks to deny these relationships, showing that he believes that representational, authorial power is the paradoxical route to critical - social - autonomy. On the other he demonstrates that the form of content and its expression are clearly separate, independent articulations through the production of a fully representational account of architectural practices which nonetheless produce highly affective forms of expressive architecture

which 'force perception' (produce visceral, challenging experiential affects) in the bodies of their 'users'.

# **Part 3:**

## ***Making sense***

## 5 \_ Species of affect



**Figure 23\_**  
**Diagram of affects of the Bat House Project**  
Judges in red, collaborators in yellow, bats  
coloured in green.

This fifth chapter describes and analyses 'the Bat House Project' – a RIBA competition (2007) instigated by the 2004 Turner Prize-winning artist Jeremy Deller and entered by this author as part of an interdisciplinary team, winning second place in the professional category. The chapter explores the role of external relations in developing architectural forms within a specific formal design process whilst examining the value of accounting for these processes using a Deleuzian design-research methodology. The chapter constructs a non-representational account of the design process in a project that composes<sup>101</sup> architects with an especially indeterminate user. It uses a diagramming methodology to identify and make explicit the operation of a series of interlocking diagrams of power, between which the role of the discipline of architecture, its openness to interdisciplinarity and its engagement with the user (in this case bats) are defined.

This chapter explores the design process as the creation of 'diagrams of affect' (through compositions between bodies), arguing that the composition of diagrams of affect with both content and expression should be understood as the concrete, critical power or potential of architectural expertise rather than an indeterminacy that destroys boundaries of control and devalues its social and commercial bond. The chapter explores the manner in which this doubly articulate definition of form acts to include users as affective agents in a process that problematises the desire of representational design processes to produce typologies. Part one investigates the affects in the competition that impacted on the processes of judging. It examines the nature of the aesthetic valuation of the architectural discipline in response to relationships outside of the usual disciplinary situation in a RIBA competition. Part two explores how the interdisciplinary collaboration of the competition team and the requirement for the inclusion of a non-human species in the competition 'project' changed the nature of its process and the qualities of its entries. The third part of the chapter considers how the relationships in the competition enabled the bats to be



addressed. It examines affects which changed the potential of the project to include 'users' and redefines both beauty and practicality as forms of 'form'.

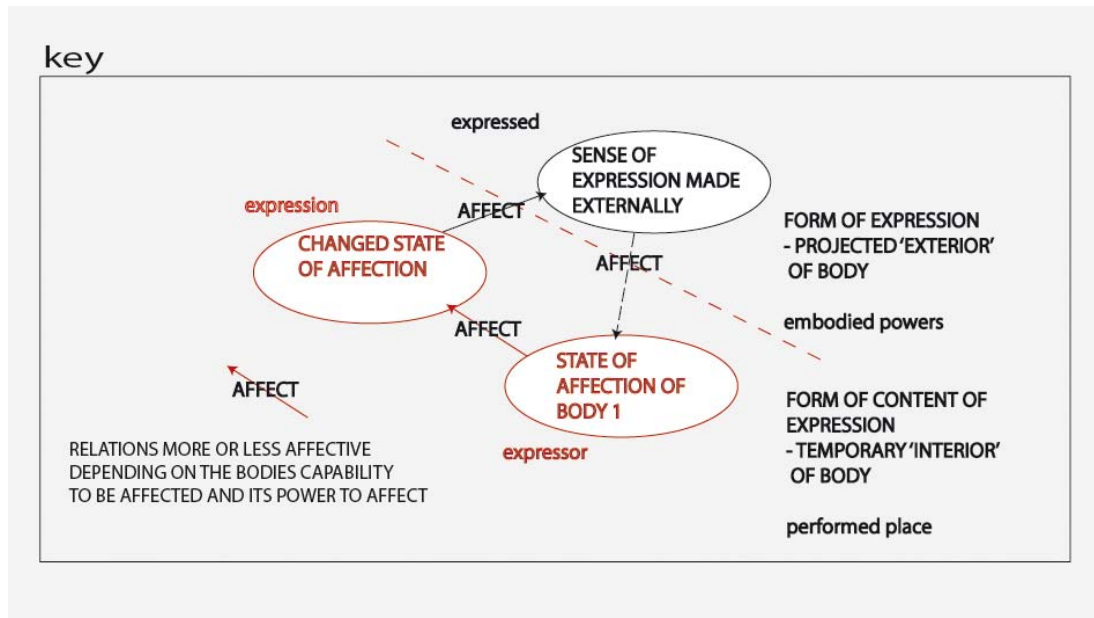


Figure 24\_  
Key to diagram of affect of the Bat House Project

The distinct trajectory of our Bat House Project design process was constituted by the feelings, opinions, personalities, drawings and models which it both produced and followed as a continual process of interaction between potential and concrete expressions of the immanent situation. By definition, each of these moments of real affect or distinction resulted in a change of path in the design process. These pathways are at once psychological, technical and practical, but are detected as affective moments in terms of the production of a discernible difference in the process and its subjects and objects. To structure and illustrate the connections between these affective moments, I have drawn a summary diagram of the interaction between them, which I subsequently explain through a narrative linking their descriptions. These affects are set out in Figure 23, and their individual construction is explained in the key diagram, Figure 24 above.



Figure 24 indicates (in red) a changed state of affection of the body as the result of an affect on the body. The expression of this changed state of the body has the power to affect other, external bodies and this is 'what is expressed'. The interior, 'performed place' or form of content of a body is only known to other bodies by way of its form of expression and this produces what Deleuze calls the 'projected exterior'. By the same logic (of sense), the body only knows itself through the affect of its expressions and each of these expressive distinctions changes its external relationships and is therefore referred to by Deleuze as a 'selected interior' (Deleuze 1988). Deleuze warns that forms of content and expression are always a dynamic mixture, and that whilst the distinction between them is always real, it 'cannot be said that the terms pre-exist their double distinction' (Deleuze and Guattari 1992: 44). For example, for the ecologists the bat requirements of the house are the expressive affective element whose content is the architectural structure and form, whilst for the architects it is the other way around. While this is discussed in the text, the affects are presented in the diagram from the perspective of the design team.

The chapter refers to the numbered affects identified and their titles as set out in the diagram of affect of the Bat House Project, indicating at the beginning of each section which of the affects are considered, shown as both a list and as a detail extract of the overall diagram of affect of the Bat House Project, Figure 23 (For the sake of clarity, these heading images are not individually referenced). The particular affects discussed in a specific section are referred to as headings in the format (as set out below) with the (bold left justified) numbered title identifying the affects which focus the chapter section and then the (indented) numbered affects that this affect is *affected by* and what it is *affecting*. Numbers and named affects are indicated in the text in parentheses. In many cases the affects discussed are multiply affected and affecting and these additional affects are indicated as additional numbered and named references after a back-slash:

**1: Affect title and number focusing the chapter section**

Affecting 2: Name (of an affect affecting 1)

Affected by 7: Name (of an affect affected by 1) / 9: Further numbered and named affects as appropriate

It should be noted that not all relationships have been represented in the diagram and not all of those represented will be explicated. Consequently, the narrative and the numbering neither proceeds strictly chronologically nor ordinally. I only show more detail on a particular affect when it serves to elucidate the different kinds of knowledge which may be produced in a design process, and where/when diagrammatic knowledge may be located. To further aid comprehension I have divided this diagrammatic presentation of the Bat House Project (BHP) in terms of three bodies of composition: the judges, the design collaborators and the bats - in correspondence with the three sections of this chapter.

## 5\_Species of Affect

## Affecting powers

**1: Deller can't paint**

Affecting 2: Turner judges

Affected by \_: Deller's unconventional art education

**2: Flocking bats**

Affected by 1: Valuing subjugated knowledges

Affecting 3: Bat house funding / 4: Professional entries

I thought I would have a vision of bats leaving a cave.[...] it's a sight to behold [the Bat House Project] wouldn't have happened without me, I don't think [...]. After you win a prize like the Turner Prize it opens more doors. [...] you are wandering around taking advantage of this.

(Deller 2008)

Jeremy Deller believes that the inclusion of a sequence showing flocking bats in his film 'Memory bucket' was decisive in his winning the Turner Prize in 2004, which in turn, was crucial in gaining the ability to instigate the Bat

House Project.<sup>102</sup> Without this affection for bats he would not have affected the Turner judges to grant him the prize; not subsequently been able to gain an art and ecology grant (3: Bat house funding); not affect architects of the fame of Amanda Levete to participate as a judge in the competition; nor attract professional entries to a competition that also encouraged the involvement of students and schoolchildren (4: Professional entries). The most famous image of Deller's Turner Prize-winning exhibition, however, is a diagram he drew of the origin of acid house music – see Figure 26, below.

Deller's artistic endeavours often consist of instigating situations in which the expressions of marginalized bodies may be valued in an artistic context. He has claimed that 'Art isn't about what you make, but what you make happen' (Hickling 2009). For example, in projects such as the Manchester International Festival, where floats and banners were arranged in a parade, the selection of what was celebrated, how it was expressed and who participated was an unusual and critical<sup>103</sup> curation on Deller's part. For example, local 'emo' youths whom he had met 'hanging around' in the city had a float in the procession and made their own banner in the style of a trade union banner (Hickling 2009). Deller's own diagram of affect could be said to recuperate expressions of un(der)valued knowledges into a power to affect art audiences, enabled through his increasing fame. It is a diagram that begins as personal to him (he has acknowledged that he 'can't' paint or draw), but which acts to affect and express the dominant and implicit diagram (which tends to leave these expressions unvalued) by 'celebrating the creativity of individuals'<sup>104</sup> who would otherwise be ignored. In the Bat House Project, it is schoolchildren and students, alongside bats, who reveal the dominant assumptions of the architectural discipline. So whilst Deller is a judge on the competition panel and makes statements concerning the values which will be attached to the entries, we may expect that he will not be the one making the final aesthetic judgements of elegance in an architectural project: he is open to be affected by the aesthetic of the bodies

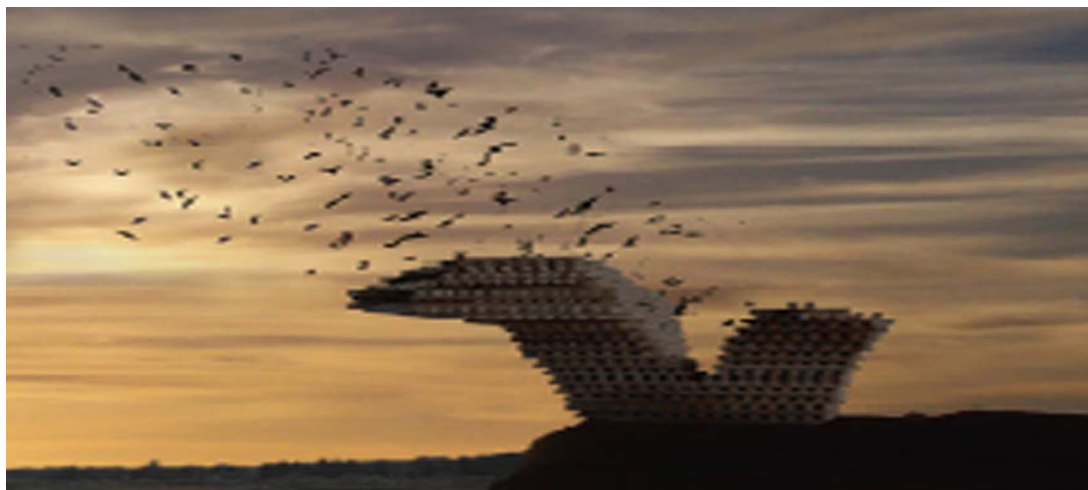
of composition (10: Judges criteria *via* 6: Bat affects criteria *and* 8: Judging architects).



**Figure 26\_**  
**Jeremy Deller**

Photographed in front of a diagram of the connection between acid house music and brass bands at Tate Britain before being awarded the £25,000 prize.

Photo: Dan Chung, *The Guardian* 07/12/2004



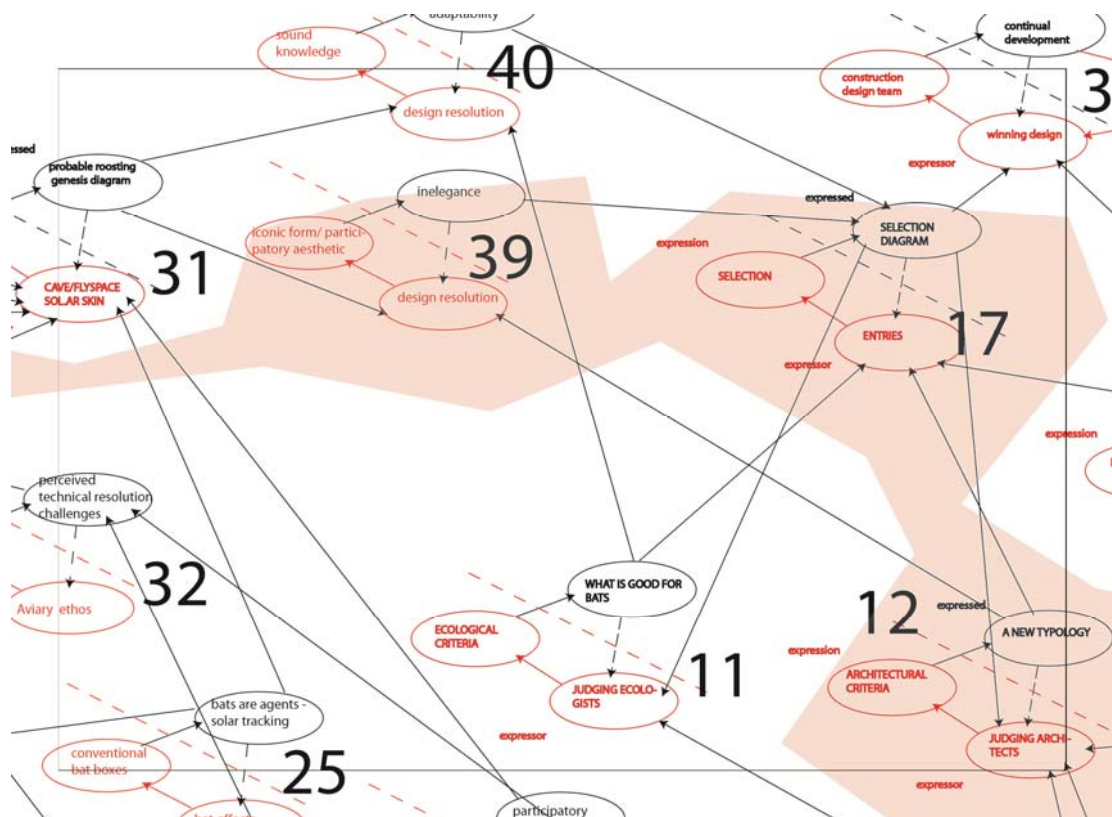
**Figure 27\_**  
**Winning entries for the Bat House Project 1**  
Mitchell & Taylor.





**Figure 28\_**  
**Winning entries for the Bat House Project 2**  
Ruben & Winter (top); Bartscher & Deutschmann

## Bat judgment

**11: What is good for bats**

Affected by 10: Criteria discourse / 17: Selection diagram

Affecting 40: Ecologist

**12: A new typology**

Affecting 17: Selection diagram / 39: Inelegance

Affected by 7: Disciplinary statements / 15: Humans affected by house

**17: Selection diagram**

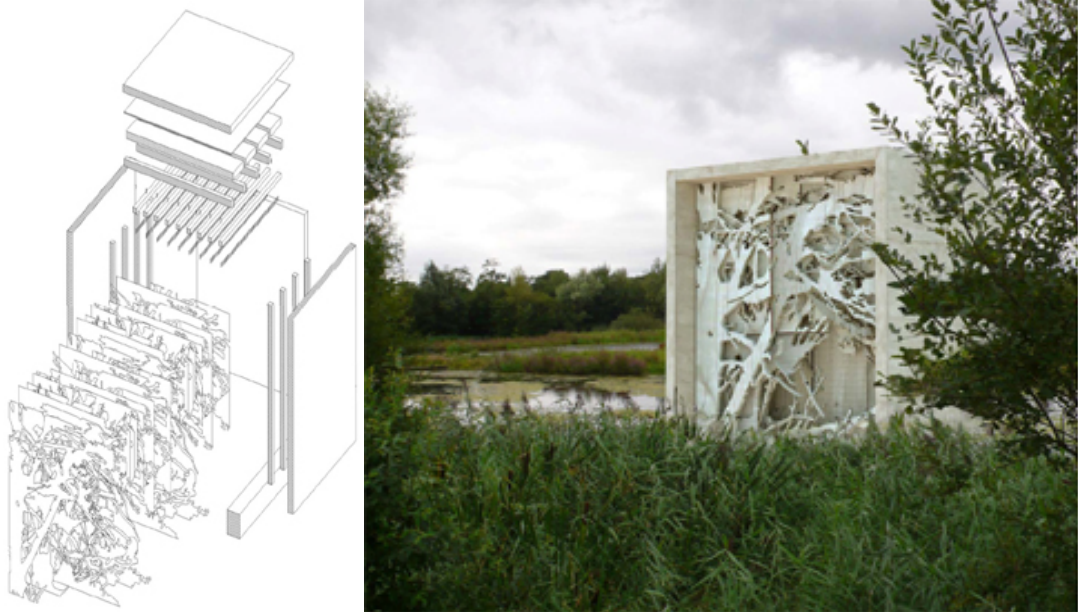
Affecting 35: Continual development

Affected by 16: Adaptability / 11: What is good for bats / 12: A new typology

The judging panel included Jeremy Deller (Artist), Amanda Levete (Architect), Rowan Moore (Architect & Journalist), Kevin Peberdy (Wildfowl & Wetlands Trust), Mike Waite (Ecologist, bat specialist), Carol Williams (Bat Environment Officer) and Pascale Scheurer (Architect, Jury Chair & RIBA Advisor). Whilst the panel's bat experts were looking for 'an approach which



showed potential' that 'could be adaptable' to 'what is good for bats', the architects were looking for a 'new typology' to 'resolve the tension between human contemplation and bat habitation' (BHP 2007).



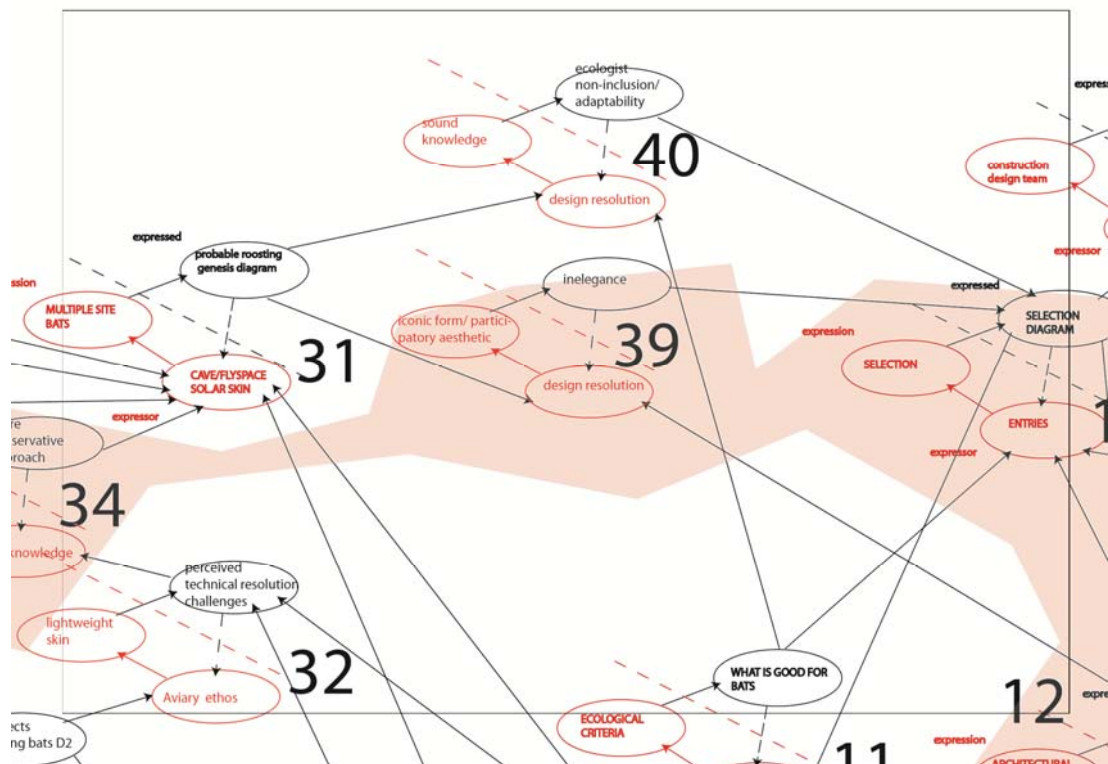
**Figure 29\_**  
**Overall winner**  
Jorgen Tandberg & Yo Murata

Despite Deller's insistence on a 'we' that included the ecologists *and* the architects, it was the latter who seemed to be in charge of the judging panel as most of the winning entries, including the overall winner, were picked out predominantly for excellence in 'architectural' features. For example, the second-placed student entry of Tilman, Ruben and Winter was described in the Jury report (BHP 2007) as a 'Red bricked cube [...] Good design', whilst designs with more stylistic inspirations were recognised but caused aesthetic concern; the third-placed entry of Bartscher and Deutschmann was praised for its 'beautiful presentation' but its Gothic aesthetic 'divided the architects in the judging panel' (BHP 2007). However, the ecologists also exerted power and on one occasion this relegated the architects' apparent favourite to

second place. The expressive form of Mitchell and Taylor was described as 'the best from the architectural point of view' because it created 'a new typology', but – paradoxically – it was said to require too much modification to be good for bats (BHP 2007). From the opposite perspective, our own entry, placed joint second with Mitchell and Taylor, was praised for being 'clearly based on extensive research [...] highly successful [...] with sound knowledge' but was also considered to 'lack elegance' (BHP 2007).

Deller's competition diagram for the Bat House Project attempts to hybridise a diagram of architectural aesthetic judgement and a diagram of ecological intent, as expressed in the competition's headline statement (which nevertheless remains asymmetrical): 'we want a project which is a thing of beauty as well as a practical object' (BHP 2007). The composition with bats is conceived through a division into two distinct realms of work serving to legitimize and enforce a distance between the architect and the user: Beauty and Practicality. This allows the judges' power to remain implicit and the bats' powers of determination to be reduced to the point of a functional representation or *typology* (which paradoxically may not 'function'). The architectural panel's aesthetic diagram is contorted in this competition arrangement to produce an explicit functionalism in the appreciation and discussion of the projects, but in the description of the relative merits of the projects the judges' ultimate criteria are aesthetic, emphasising beauty as the affect on human 'contemplation'. This spiritual adjective raises the principle of judgement of the Bat House to that of buildings of religious or civic importance which are culturally associated with architecture. Deller's diagram affects the criteria discourse of the judges but, as they themselves admit, a perceived tension remains between the architects' project to fulfil the needs of human contemplation and the ecologists' desire to ensure that the building will be inhabited by bats. However, in this project, the needs of the user cannot be assumed and there is a direct empirical test of the success of the design.

## Winning narratives



### 39: Design resolution

Affecting 17: Selection diagram

Affected by 12: A new typology / 31: Genesis diagram

### 40: Inelegance

Affecting 17: Selection diagram

Affected by 11: What is good for bats / 31: Genesis diagram

The epistemological narrative of the competition judges suggests that the design process can make rational, causal, determinations according to separate aesthetic and functional productions – beauty and practicality. This functional narrative ameliorates the potential imbalance (human contemplation versus mere animal habitation) by assigning to the bats conceptual ownership of the functional essences which are discovered by the architects' expertise (via the technical expertise of the ecologists), which are appropriate to bats and which form the requirements of the new typology. The judging epistemology praises the winner for providing the

ideal scenario wherein the aesthetic of the project is determined purely by the functional requirements of the end user – 'just thinking about the client being the bat' (BHP 2007). The dualism at the heart of the account of the project is therefore addressed by striving for an inclusive system that produces its explication from just one side of the real – a desire for an 'authenticity' of expression that is beautiful because of its ethical character. Here its beauty is understood to be caused empirically – which means intrinsically. This imagines a world of determined cause and effect that may be discovered and has its own 'pure' aesthetic expression, authentic and natural.

On one hand, the epistemology operative in the bat house judging process is dictated by the architects' using the transcendent notion of beauty, and explicitly isolates the concept of aesthetics into a defensible realm of architectural expertise. It leaves implicit the role of external powers in its formation and advances the notion that the intellect and talent of an architect is a necessary condition of aesthetic judgement. The collusion of the architects with the dualist epistemology means that when the empirical reality of the user is taken into account it becomes another formal category. The project's functionalist narrative produces an inhumation of form inside function whereby the apparent form is now an aesthetic accident derived from the natural beauty of the determination of function: a single intention, a complete determination – a typology. This attempt to conflate the aesthetical production with a functional, ethical and intrinsic determination is, however, only one half of the enduring duality of sensible appearances and intelligible essences. The opposing attempt promotes an autonomous aesthetic production as the generator or determinant of the form, and imagines that a realm of aesthetics exists in apparent autonomy that is ultimately dirtied by its engagement with every actual instance of requirement. Both rely on a transcendent notion, a supplementary eternal dimension of either chaos or God against which judgements may be made,

and such transcendent and essential knowledge is only available to the disciplinary elite.

The functionalist discourse is an ethical reaction to these strategies of control, which are seen as necessary in the process of determination of (final) form. It attempts to argue for non-reduction through the illusion that functional factors may be used to derive the aesthetic, even after they have been conceptually separated. When the judging architects presume that the bats' requirements may be typified, it is through an earnest desire to understand the user's affects, but also expressive of a need to categorise them in a controllable form, avoiding the need continually to repeat the engagements required to produce them. The desire to do so in the bat house competition risks reducing bats to an axiomatic and technical category of determination, but this is prevented by the affective engagement of the ecologists. This reductive tendency is an 'essential' performance of typical architectural disciplinarity.

What is of interest in the Bat House Project is that these tensions are played out without one winning over the other. The bats are not as easily determined as humans – not so adaptable, more disagreeable. This quality produces a nature that resists the methods by which traditional design processes address the user. In the case of the Bat House Project, user requirements may only be derived with the intervention of specific disciplinary expertise and, here, defining the set of functions requires them to be shared with the architects by the ecologists. Whilst the winning design was chosen unanimously, we appear to see the criteria of the ecologists on the panel deferred, as the architects and others may immediately agree that the winning design looks aesthetically pleasing, whilst the ecologists may see that the design is open to adaptation. This latter aspect becomes the ultimate empirical mechanism by which the bats may actually be addressed -

how the project remains open to its users (16: Adaptability). I will return to this is the final part of the chapter.

The desire to produce an object which both possesses the aesthetical values suitable for the judging audience (who produce the desire of a particular form for human contemplation) and is judged to meet the sensual requirements of the bats (initially as represented by 'technical requirements' compiled by experts) recognises the production of different affects as compositions between different bodies – the production of different *species* of affect, differentiated by the relative capacities to be affected of the organisms with which they are in composition. Moving from a dualist to a triadic analysis, the project should be understood as expressing the tastes of both the architectural judges *and* the bats – with a lesser or greater imbalance of power between them. The Bat House Project recognises and enforces this parallel nature despite the architectural narrative continuing to reduce it to one or other side of the dualism. It does so through the power of its selection diagram to insist on this composition with bats, and firstly this is expressed in the fact that the ecologists on the panel are free to express their knowledge through action in both the judging and development of the project. However, in so doing it enables the affective involvement of ecologists and ecological expertise in the work of the competition teams.

Test: Good for bats: Yes

Test: Aesthetic appeal: Yes

Test: Applicable elsewhere: 'Need to show that each pyramid module is saleable as a kit of parts [...]. Emphasize availability and simplicity of all components.'

(Wells 2007a)

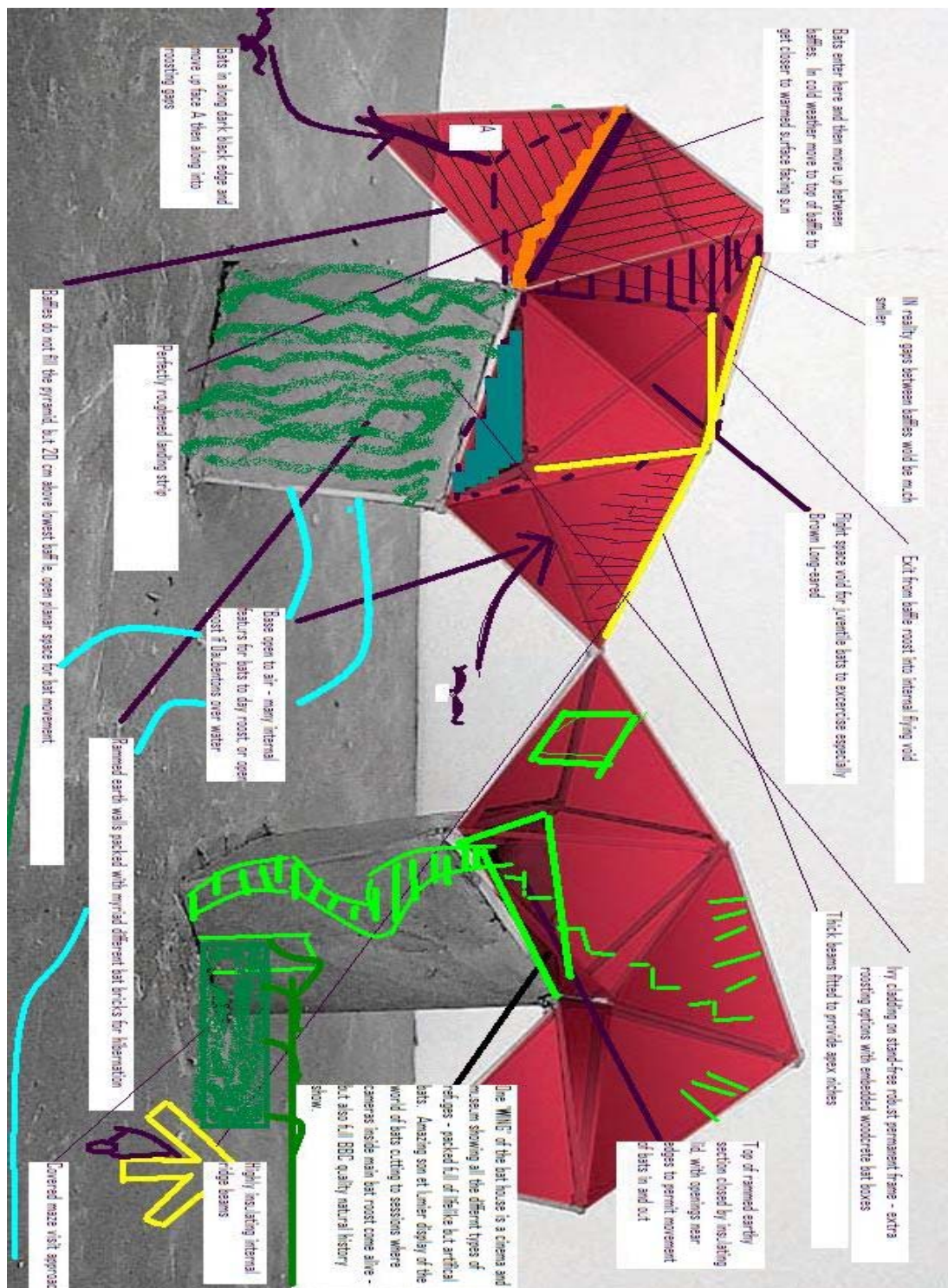
The email text above is from Dr Mike Wells' response to our initial formal proposals following our first design charette. He confirms that in his view the

design met many of the requirements of the brief but had yet to be clear about how it would enable innovative interactions between humans and bats, as well as how exactly the ambitions for the sustainability or autonomy of the system would be achieved. At this point we believed that we had produced a form highly likely to attract and accommodate bats and the ecologist also thought that it had achieved the aim of aesthetic excellence. Subsequently, the strength of the research and knowledge of our team entry was recognised by the judging panel, and this suggests that the ecological expertise which was available to our team, and which might be considered at least comparable with that of the bat specialists on that panel itself, was expressed in an affective manner in our entry: the judging was anonymous so there was no way of knowing the constitution of our team apart from its expression in the design and the competition entry drawings. We deliberately sought to ensure that we expressed the perceived interdisciplinary strength in our entry through the choice of drawings and explanations of how it would provide positive affects for the bat species present in the site area; for example the panel noted that we were one of few entries that addressed the manner in which bats would fly in and around the bat house. However, our entry was also described as 'inelegant' by the judging panel.

There are a number of affects which may have prevented our design from being found more aesthetically pleasing by the panel. Our choice of an iconic form early in the process might be seen as partly responsible for this, since the judges' comments on other entries suggested a tendency to prefer architecturally neutral forms (39: Iconic form/participatory aesthetic). This might have contributed alongside moves away from a more dynamic form as shown in diagram D2 – Figure 39 (27: Heterogeneous environments) – in the pursuit of simplified geometries and construction techniques which would facilitate construction by unskilled local groups. A presentation decision that down-played a diagram drawn to show the development of the project

concept in favour of a more resolved 'professional' approach might not have affected the judging panel with our intention to develop the house as a kit of parts that could be tailored by specialists and constructed by non-specialists. See (31: Genesis diagram). However, another key issue was the tendency by the interdisciplinary team to take a more conservative approach in order to ensure that the design might actually be roosted (34: Sound knowledge / Conservative approach), which was a move away from a desiring architectural affect (32: Aviary ethos). This would have required a number of scientifically evidenced assumptions about Bat behaviour to be challenged. See the next section for further analysis.





**Figure 30\_**  
**Ecologist's response (Dr Mike Wells)**  
 Marked-up photograph indicating how the structure could be used by bats for internal circulation





**Figure 31\_**  
**Competition entry, sheet 1**  
Perspective, site plans and night view

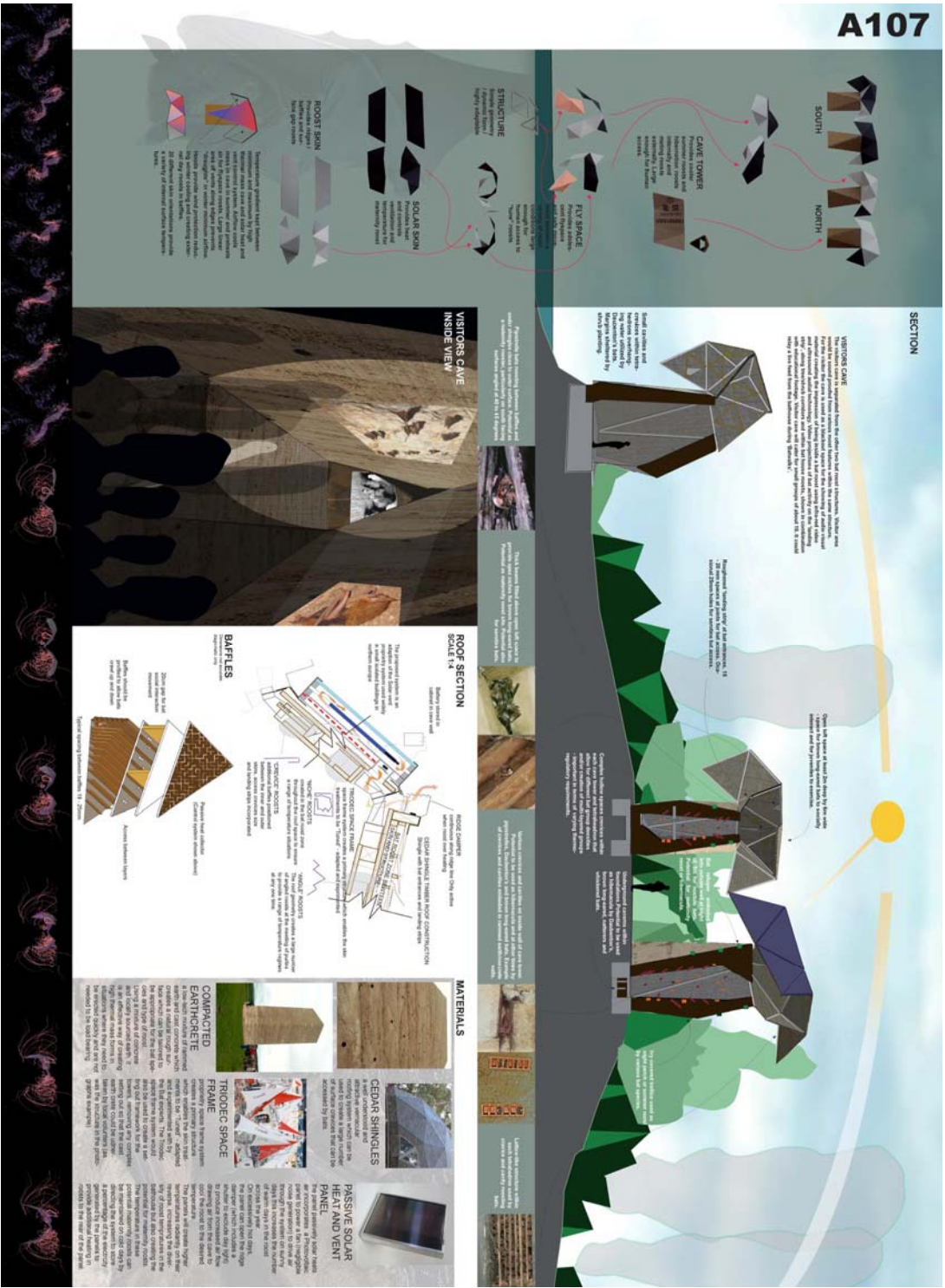


Figure 32\_ Competition entry, sheet 2  
Section, process, detail and interior view



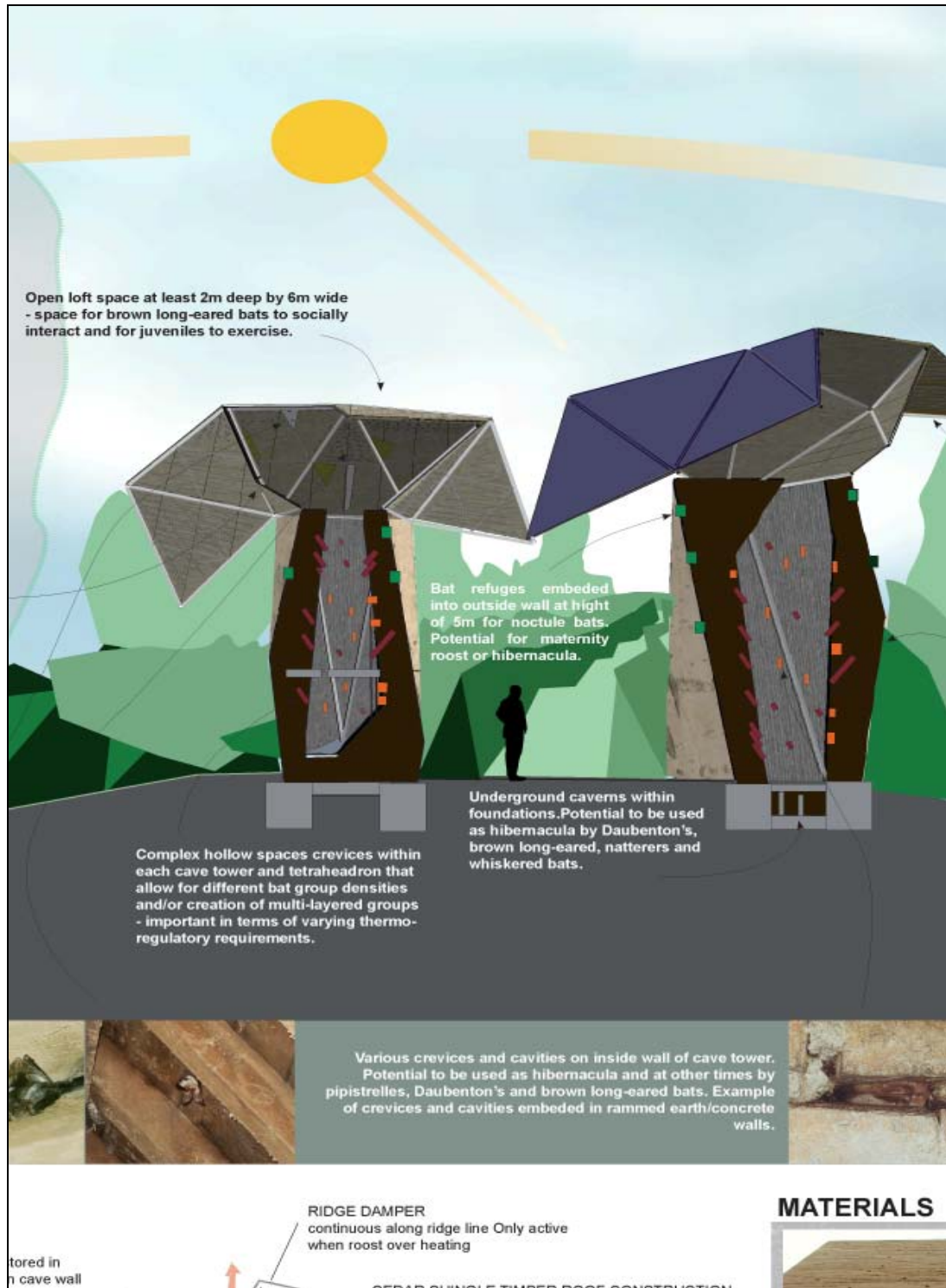


Figure 33\_  
Competition entry, sheet 2, detail 1  
House section and crevice details

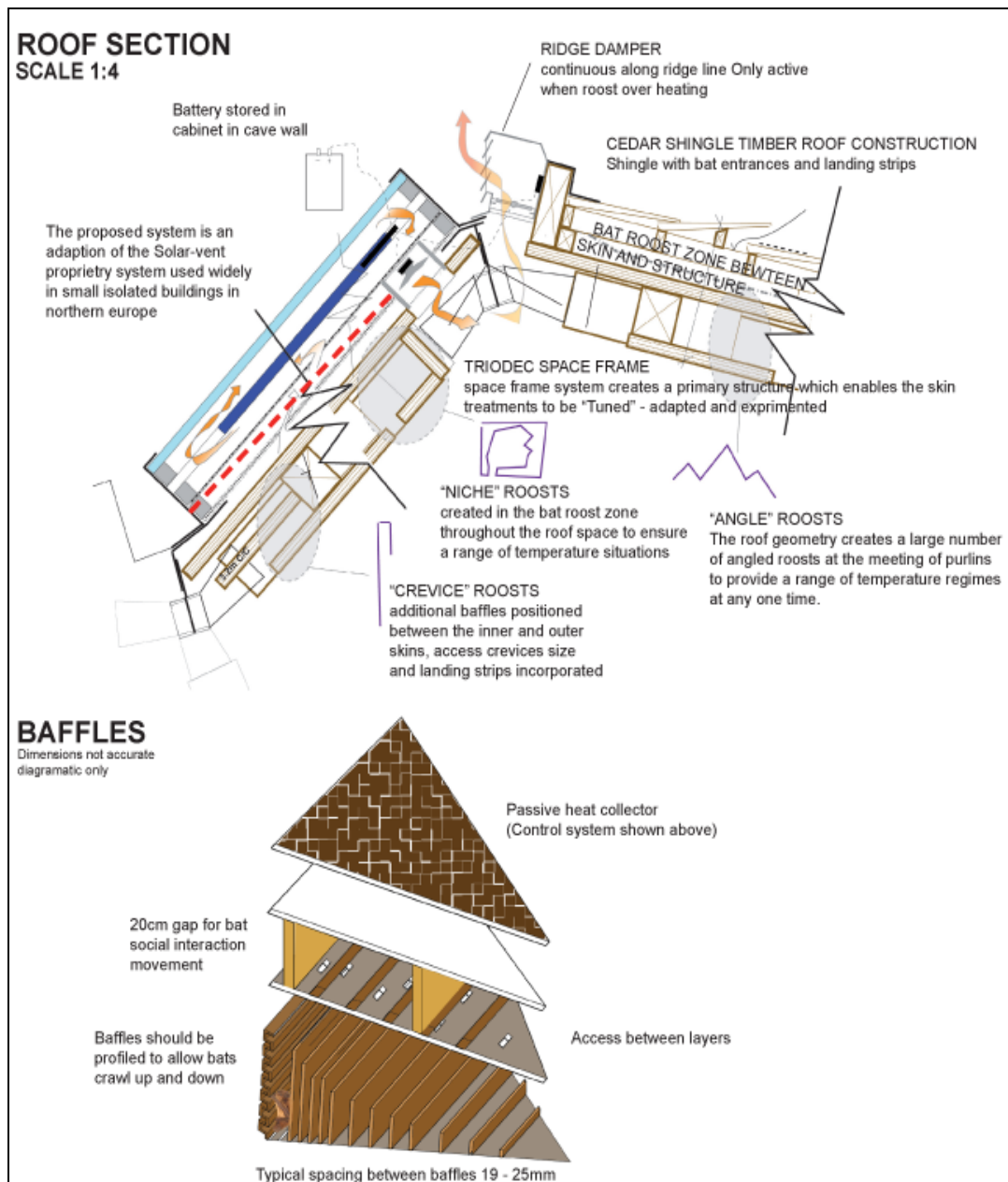


Figure 34\_  
Competition entry, sheet 2, detail 2  
Construction and roosting detail

## 2 Compositional ability

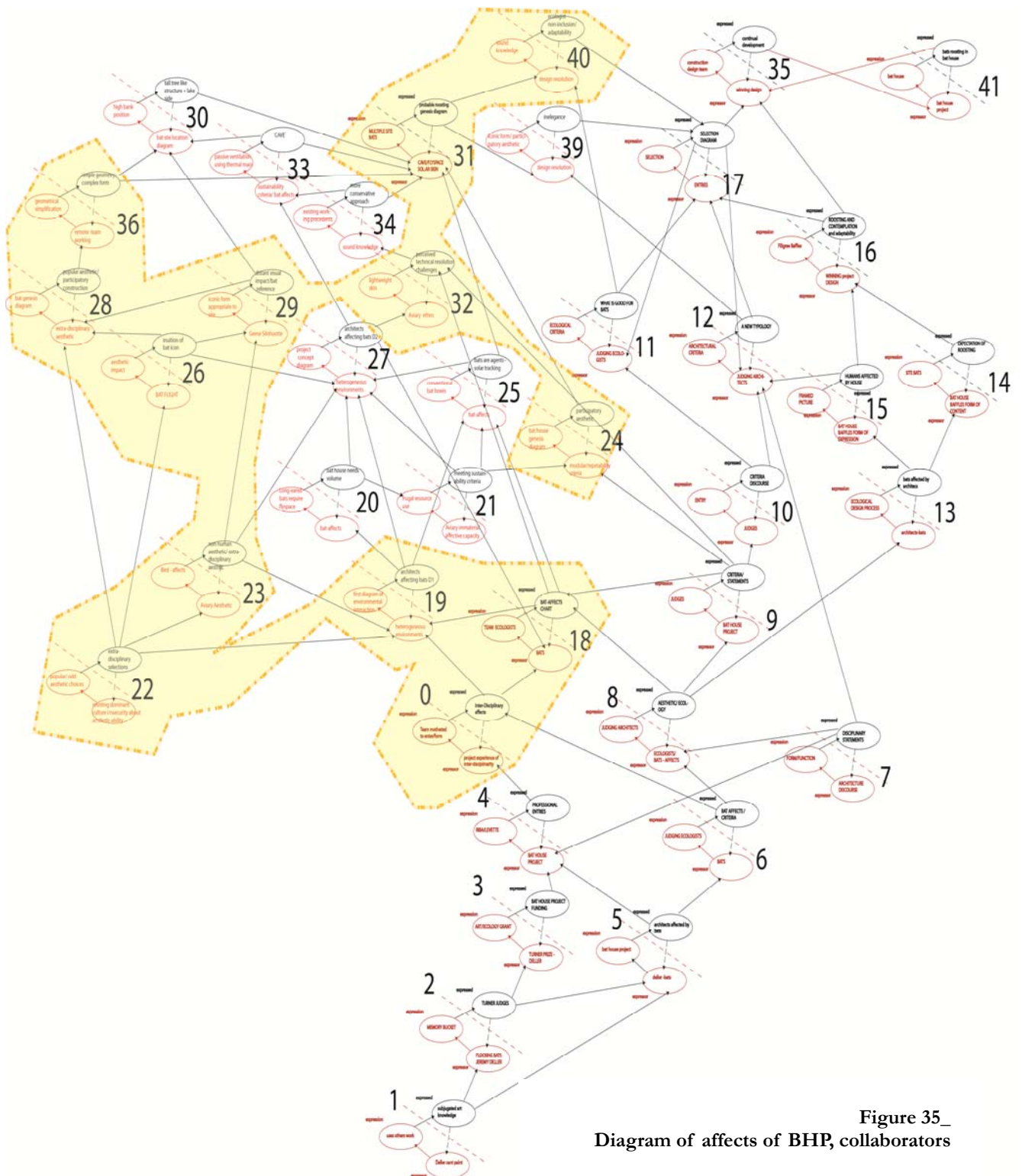
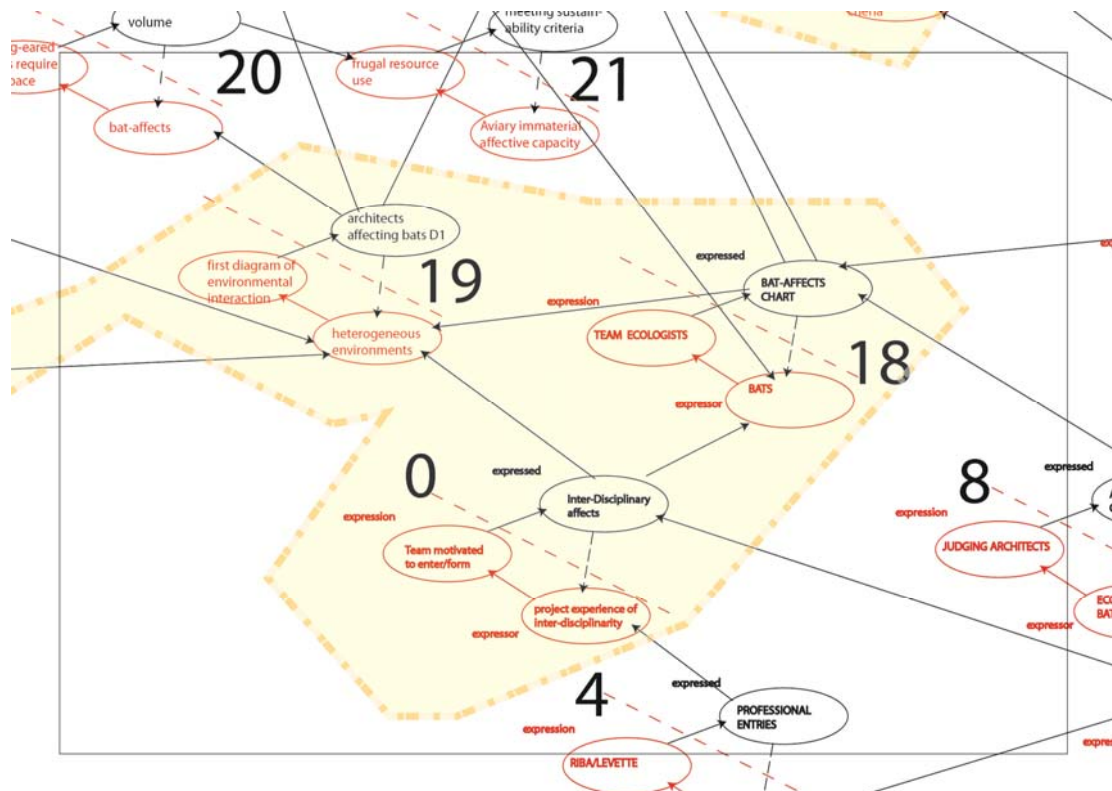


Figure 35\_ Diagram of affects of BHP, collaborators

## Designer team

**0: Interdisciplinary**

*Affecting* 18: Architects affecting bats D1 / 19: Bat-affects chart

*Affected by* 4: Project reputation / 6: competition bat requirements

**18: Bats**

*Affecting* 19: Architects affecting bats D1/ 25: Bats are agents / 32: Technical resolution

*Affected by* 0: Interdisciplinary affects / 8: Ecological aesthetic

**19: Heterogeneous environments**

*Affecting* 20: Bat house needs volume / 25: Bats are agents / 27: Architects affecting bats D2

*Affected by* 0: Interdisciplinary affects / 18: Bat-affects chart / 22: Extra-disciplinary selections

I entered the Bat House Competition as part of a team that was assembled specifically to address the competition brief on the basis of previously positive collaborations which had enabled the desired interdisciplinary engagement. Our team principals were Jochen Rabe, landscape architect

(ARUP); Dr Mike Wells, ecologist (Biodiversity-by-design) and myself. Jochen Rabe and I had led the architecture and landscape team for Battle McCarthy Ltd on the landscape masterplan and detail design for the Greenwich Peninsula in 2005. Dr Mike Wells was our ecology consultant on a project that attempted to produce high ecological value in a high-density urban environment. We knew each other well, and the RIBA status of the project, the involvement of Jeremy Deller and the stated intention to build the winning design were positive affects on our decision to enter the competition; none of the team would have been attracted or able to commit the necessary time, energy and resources to anything which might be seen as frivolous within their company structures or within my PhD research programme.

Our team had developed an interdisciplinary practice whereby the ecologist was happy to make architectural interventions and the architects were happy to question ecological assumptions. Jane Rendell argues that architecture may be understood as a multidisciplinary subject, with architectural design a specific discipline within architecture, whereas a practice should only be called interdisciplinary when it enables different disciplinary approaches to 'exert critical pressure on one another' (Rendell et al 2007: 2 and Rendell 2004). In this respect multidisciplinary may be seen only to use, subsume or dissolve the power of one discipline into another, operating reductively and accounting for the powers of each discipline according to representation, whilst interdisciplinary practice is rather an openness to mutual affection that may produce diagrammatic knowledge. Rendell notes that Julia Kristeva records interdisciplinarity as the subject of anxiety because of this capacity (Rendell 2004). The anxiety she describes concerns the problems encountered when questioning the disciplines that protect our domains of operation (Kristeva 1997). If this is what we also experienced within our interdisciplinary design team, then it might be described as concern over the reduction of capacity that non-disciplinary



territorial expressions might produce, since they might indeed involve a feeling of loss of expertise – one must be willing to ask questions to which one does not know the answer, and to accept that the disciplinary answers one would normally give might enforce disciplinary limits rather than act as creative mechanisms. However, our previous compositions had provided positive evidence of the increase in power that such compositions might produce.

So we have the following. Those in yellow specifically mentioned on the citation for Barn Elms SSSI. Green are relatively common species in the wider area. The blue highlight shows the successes one would expect to achieve with a very good design. The other cells are possible – but icing on the cake, so to speak. As you can see there is a lot of complexity and subtlety about this.

(Wells 2007)

Very early in the design process our ecologist, Dr Mike Wells produced a volume of information that was summarised in charts of affects of both the bats and the humans in the project – see Figure 37 and Figure 36 below. For Wells the key problem of the project is to address the requirements of the various bat species, but he also understands that the competition jurors require their own expectations to be met. The expressions produced by ecologists to represent the needs of the bat species – 'technical requirements' in briefs or 'charts of affects' shared within teams – are empirically derived, explicit and sceptical. This may be compared with the functional requirements of human housing, which are paradoxically (since it is easier to engage with humans than with bats) much less equivocal and open to engagement – much more habitually internalised, dogmatic, 'typological' representations. The conclusions made by the ecologists about the relative behaviour of bats record the results of a number of actual encounters between humans and bats. The ecologists had to go out and

encounter them, to affect them and be affected by them, producing diagrammatic knowledge and charts which might enable non-ecologists to share in and become common with that knowledge (6: Bat affects criteria / 18: Bat affects charts).

The first chart below highlights some complex affects of the judging panel, such as the issue of aesthetic excellence and the 'technical' requirements of replicability and sustainability. Comments such as 'not gold leaf then' indicate a socio-cultural analysis of the affect of particular aesthetic expressions on the judging panel, and that constructions understood as 'modest' or economical would be expected. Other headings relate directly to bat requirements, not directly supplied by the brief but arising from Wells' interpretation of the information it contained. Wells' second chart employs other ecological sources to set out in more detail the bat species which might be found on the site. These charts were to be read alongside a plethora of detailed information, provided by Wells, on the requirements of each species. He also identifies the need to consult ecologists with more specialist expertise in particular aspects of bat-affects, such as encouraging incubation.

The first chart is important because it attempts to list all the potential ways in which we might affect the competition and the second chart is of importance because it considers all the bats with which we might be able to compose and of what those compositions might consist. It considers the terms by which we might be able to compose with the nine species of bats which might be found in the site area, by examining the provision required for the multiple roosting behaviours of those various species (day, feeding, maternity, hibernation) and lastly also in terms of architectonic ambitions (autonomy, replicability, human/bat interaction). These articulations constituted the form of content of which was expressed as 'sound knowledge' to the judging panel.

The charts and many other sources and forms of information produced by our ecologist were not automatically affective and were yet to be understood beyond an indicative level. Such technical requirements are only diagrammatic when they are embodied – in our case the ecologist demanded that the knowledge be affectively enacted and not just represented (successful bat roosting in the final structure is more a positive affect on the ecologists than on the architects if disciplinary boundaries are maintained) (11: What is good for bats). The process by which this was achieved is exemplified in affective engagements such as (25: Bat affects – agents). However, the design team's previous collaborations had already generated diagrammatic knowledge of an interdisciplinary ecological approach and affects such as (25) were also affected by our pre-existing capacity to be affected by these expressions. In particular, our tendency to interdisciplinarity was a positive affect for each member of the team according to different, personal mechanisms – their capacities to be affected by it. For example, Dr Wells is director of his own company, Biodiversity-by-design, which has explicit interdisciplinary intent. My personal diagram of affect for ecological interdisciplinarity I have summarised as (22: Extra disciplinary selections).

Importantly, however, the positive affects of an interdisciplinary ecological approach are enabled and determined by the wider affective context of the competition. The engagements with users produced by the ecologists in our team and in the judging panel are ultimately dynamic affective engagements rather than static representations (41: The Bat House Project). However, this affect is produced through a complex interlocking with more conventional architectural competition diagrams (35: Winning design). This situation is fostered by interdisciplinary engagement being a positive affect of the bat house competition diagram, one which also affects the architects in the judging panel: immediate positive affects on this interdisciplinary engagement may be traced to Deller's affection for bats, which directs that

architects think about bats (5: Architects affected by bats), and to the composition of the judging panel, which produces a requirement for what we might call an ecological aesthetic (8: Ecological aesthetic).

Species	Chance of Breeding in Bat House?	Chance of Hibernating in Bat House?	Use of Underground Structures?
Common Pipistrelle	Yes	Yes	Rarely
Soprano Pipistrelle	Yes	Yes	Rarely
Nathusius' Pipistrelle	Yes but rare species	Yes but rare species	Rarely
Brown Long-eared	Yes	Probably	Yes
Daubenton's	Yes (low)	Yes	Yes
Natterers )	Yes (often in mortice joints on old barns but few about)	Yes but few about	Yes but few about
Serotine	Yes	Probably	Yes
Noctule	Very low (but could have surrounding dead tree mimics for this species)	Yes	NO
Leislars	Yes but few individuals around	Yes but few individuals around	NO
Whiskered/Brandt's	Yes but few individuals around	?	Yes but few individuals around

Figure 36\_  
Species chart  
(Wells 2007)

Issue	Notes
<b>EXCELLENCE</b>	
Art linked to architecture linked to biodiversity	Need to ensure it casts a really distinct profile, looking good by day and by night
Environmental excellence	Low energy, use of
Aesthetic excellence	Can't just work well for the bats, has to look great too
<b>PUBLIC ENGAGEMENT</b>	
Public engagement – we're asking for ideas or examples of how people can observe bats without disturbing them.	Thermal imaging?
Display element – education and excitement-creation	Lessons from some of the electrickery at the Natural History Museum?
Use of CCTV	One-way glass – need to consider lighting. Visit Bristol Zoo
<b>WIDER APPLICABILITY</b>	
Buildable	Not overly complicated construction technology
Practicable	Not gold leaf then
Replicable	Maybe in part
Maintainable	Access for licensed staff once or twice a year
Possible to add in part or whole to existing buildings elsewhere	Problem is that to maximise chance of most species – need to have quite a large and special one-off design...
<b>EXPERIMENTAL</b>	
Innovative	Of course
Modifiable by experimentation	Modular?
<b>MULTIPLE SPECIES REQUIREMENTS</b>	
One large of several clustered structures	Why not a modular concept?
Ideal roosting requirements for wide range of species	See below
Different temperature regimes in different parts but constant in any one part	See below – insulation and artificial heating and thermal controls are key
Use of incubators	Roger is the expert – we need to discuss with him
Ventilation carefully considered	Air needed but no draughts
Maternity roosts accommodated	Important to secure this
Hibernation accommodated	Underground and above ground – see examples attached
Other day roosts accommodated	To be discussed
Range of openings required	Relates to autecology studies
Landing platforms to be designed	Relates to autecology studies
<b>SUSTAINABILITY</b>	
Sustainable materials	Interested in Plasdec, which I used to create the Wandsworth bird barges. Recycled plastic – durable etc
<b>CONTEXT</b>	
Design adjacent landscape to provide safe and conducive bat corridors and foraging	Very important as Wetlands Centre is now an SPA – need to get species right – dark corridors and the context. Suggest building is over water to attract breeding Daubenton's, as under a stone bridge or culvert
<b>SECURITY</b>	
Must be secure – fencing?	Water might be best?

Figure 37\_  
Chart of judges' affects  
(Wells 2007)

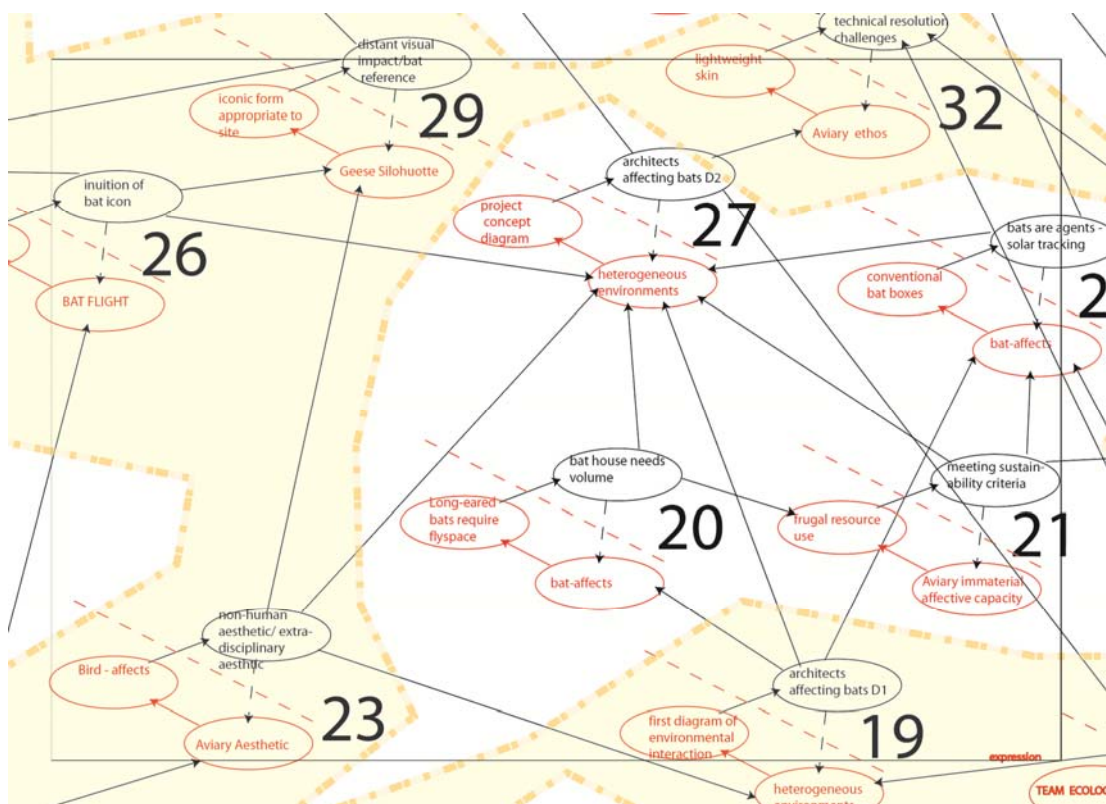
In terms of engaging with the ecologist in the immediate design progression of the project, a first step was to attempt to put these pre-existing embodied knowledges in the context of this project, which was expressed in an initial diagram D1 (see Figure 38 below) (19: Heterogeneous environments – architects affecting bats D1). This diagram was a first attempt to produce suggestions of form that could compose and produce the affects identified by the ecologist – the positive affects desired of both bats and the competition. The competition claimed four selection criteria: Suitability for bat roosting requirements; Aesthetic quality & innovation; Engagement with relevant sustainability issues; Replicability in other locations (BHP 2007). There are four associated but not directly correlative relationships represented by the diagram: Sectional variation; Separation and engagement; Landscape not building; Additive modular units. The key impetus of this diagram in ecological terms was our previous experience as an interdisciplinary team, and these four categories were intuitively angling the design towards the creation of heterogeneous micro-climatic environments and posing the problem of form-making in these terms.

The diagram was not only drawn as a positive affect of engagement with the ecologist – there were also negative affects in the relationship that the diagram attempted to address, which caused interdisciplinary anxiety. For example, the ecologist had begun to put forward architectonic suggestions of materials and structures in his charts and had responded immediately to the competition team's formation with so much information that I felt pressured to reply with a diagram such as this in order to ensure my preferences for the project trajectory were also expressed. In this sense an affective expression is also the creation of a territory, because it controls, limits or enables the subsequent expressions of composing bodies. The 'rules for realisation of powers'<sup>105</sup> had to be shared, and whilst in this case there was no dispute about these particular expressions, others discussed later were not shared and this changed the direction of the project away from my

## 5\_Species of Affect

intuited, preferred trajectory (27: Architects affecting bats D2). As may be seen with the use of precedents (34: Sound knowledge), external expectations of success may produce insecurity and conservatism, leading to a collapse back into the 'civil state'.<sup>106</sup> In these circumstances, the territory occupied or claimed by the interdisciplinary body becomes more limited rather than more expansive.

### Encountering species



#### 23: Non-human affects

Affecting 19 & 27: Architects affecting bats / 26: Intuition of bat icon / 29: Distant visual impact

Affected by 22: Personal diagram of affect of Stefan White

#### 26: Bat flight

Affecting 28: Popular aesthetic / 29: Distant visual impact

Affected by 22: Extra-disciplinary selections

#### 21: Immaterial



Affecting 20: Bats need volume / 24: Participatory aesthetic / 25: Bats are agents / 27: Architects affecting bats D2

Affected by 18: Bat-affects criteria / 22: Extra- disciplinary selections

### **34: Sound knowledge**

Affecting 31: Probable roosting / 33: 'Cave'

Affected by 32: Technical resolution challenges / 18: Bat-affects chart / 9: Criteria statements

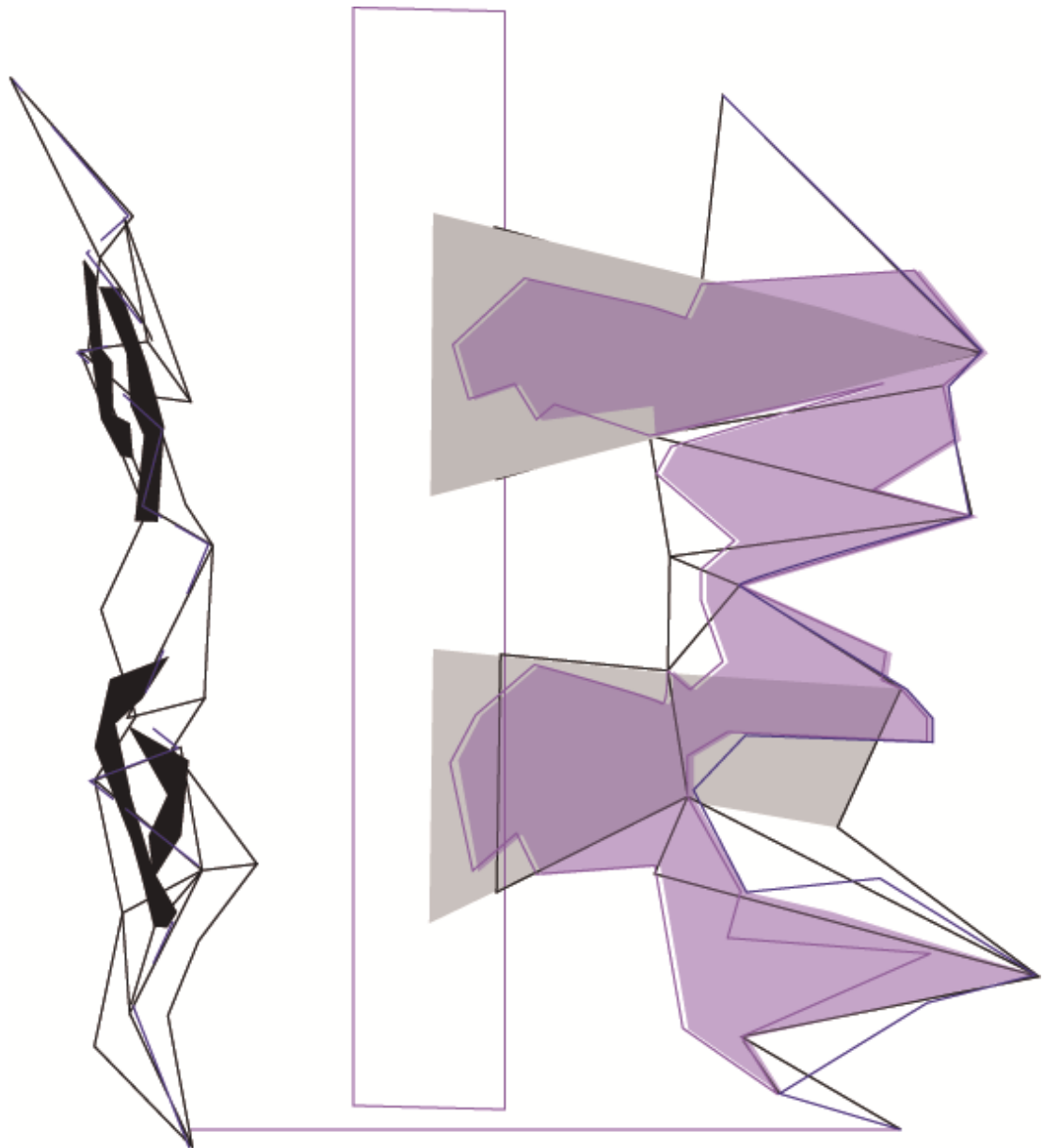
I arrived at my engagement with architecture by a route that rarely visited areas of aesthetic production. Predominantly scientifically educated until architecture school, for many years I had feelings of inadequacy in relation to my aesthetic abilities. My design portfolio shows a tendency to select aesthetics that are on the edge of accepted taste within a traditional architectural canon, and are associated with wider public and popular cultures. This resistant tendency has in the past produced negative affects in a judging audience of my work, but I have also produced forms and images of them that have been thought highly seductive and won other competitions.<sup>107</sup> Any personal desire to challenge an architectural judging audience was tempered by a reluctance to waste my teammates' time and a strong desire to ensure that we won. This tendency is related to other personal affects regarding my position on the nature of socially just architectural practice.

I have often sought out 'extra-disciplinary' affects that may be used to produce an aesthetic expression for architectural form, approaches often allied to deterministic engineering strategies. For example, this was expressed in my decision to work in an engineering consultancy as part of multidisciplinary teams, as well as in the work I did there, providing sustainability consultancy to architectural practices. Working for architects required that engineering advice was interpretable in an architectural context (indeed this was the implicit purpose of my employment). Consequently, the advice we provided was always architecturally formed rather than simply quantitative. What we produced was made seductive and

accessible for our architect clients, but due to the nature of our interventions it was at least partially determined by structural or climatic forces and narratives of efficiency or ecology – we provided mechanisms by which architects could include 'extra'-disciplinary affects in their proposals, for example, enabling architectural design teams to produce work that was literally open to the outside in terms of a dynamic interaction with climate. Expressions in the Bat House Project which produced an aesthetic direction (seeking seductive affects on architectural judges) were therefore tempered by other considerations, most prominently the process of design resolution. The first diagram D1, Figure 38 (19: Heterogeneous environments) and the project concept diagram D2, Figure 39 (27: Architects affecting bats D2) suggest an aesthetic direction that might be realised in a seductive manner. Later expressions respond to affects related to problems of realisation, ecological risk and the inclusion of sustainability factors, which direct the final forms away from some of the more immediately seductive articulations.

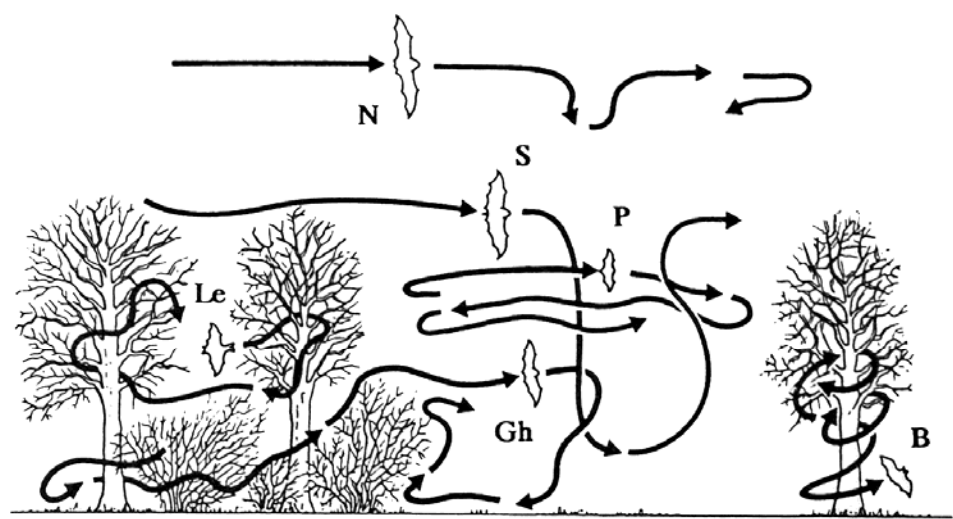
However, the first affective influence on my approach to the Bat House Project was bat flight imagery accessed via a link from the Bat House Project website, Figure 42 (26: Bat flight). The key affect on the selection of these bat flight images as an aesthetic influence relates to the pre-existing diagram of affect personal to me and described above (22: Extra-disciplinary selections / 23: Non-human aesthetic), and the affect of these images is made an explicit reference in the final genesis diagram (31: Genesis diagram). These images became an important aspect of the project aesthetic that emerged as the project progressed in interaction with other affects. The images influenced the decision to make an iconic form that referenced bats, and their selection was reinforced by the discovery of iconic silhouettes of flying geese at the edge of the site, Figure 41 (29: Distant visual impact), and by a diagram that spatialized knowledge of bat species behaviours and was

an explicit influence on the final siting of our design (30: Bat species location diagram) –Figure 40 below.



**Figure 39\_**  
**D2 Diagram of heterogeneous environments within a bat-inspired geometrical form**

There are four intersecting habitation zones indicated in the diagram - grey, purple and inside and outside of the black lines. The plan and section represent a method of determination of geometry of an irregular form



**Key - bat species**

*N* - noctule  
*S* - serotine

*P* - pipistrelle  
*Le* - brown long-eared

*B* - Bechstein's  
*Gh* - greater horseshoe

Figure 40\_  
Bat flight diagram  
(Biodiversity by Design)



Figure 41\_  
London Wetlands Centre sign  
Inaccessible part of park facing the Thames

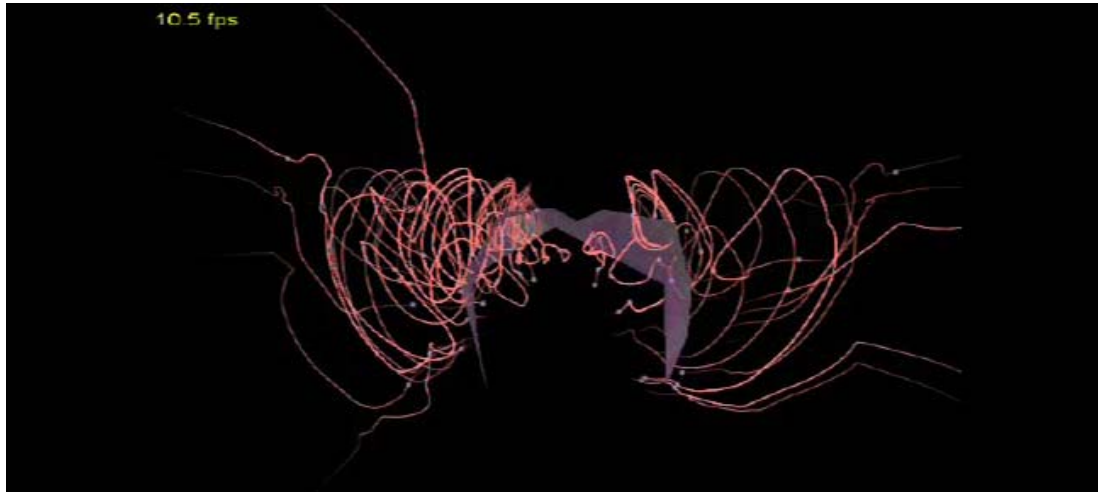


Figure 42\_  
Bat flight model, still from video  
(Visualization Research Lab 2010)

Two particular precedent studies were influential in our design for the project, one for its radical architectural response to the problem of designing for other species and the other for its ecological response to designing for bats in a conservation area. The first was the Aviary at Regents park Zoo, by Cedric Price (1963), Figure 43; the second was a built project for a bat house in a UK national park, Figure 44. Whilst the selection of precedents within the design team might be thought to be predominantly a matter for its own agency, the judging diagram operates by affecting the performance of such selections – and it is in this sense that Deleuze argues that a diagram is the mechanism of *imposing* subjectivity. In terms of the judging process, the almost immaterial presence of the Price aviary was thought to suggest positive approaches to the problem of the disjunction between the size of the bats and conventional, built bat houses, and would suggest an architectonic aesthetic that would please an audience of architects. In addition, although the aviary eschews orthodox architectural aesthetic expression, it does so because it responds predominantly to the affective capacity of birds and does not make explicit reference to formal architectural norms or wider social expectations of architectonic form. The minimal construction used to create the spatial and territorial definition required for

the aviary to positively affect its users suggested an approach frugal in resource use, which might create positive affects in the judging panel in terms of addressing the brief's sustainability requirements. Key to this, however, was that the definition of the needs of the users in the Price design was highly responsive, making it distinct from other aviaries. Price responded to the intuition that since birds roost in trees, specification of a structure suitable for humans was not necessary, and having a structural indeterminacy similar to the flexibility of trees could produce positive affects in both humans and birds. The selection of Price's aviary as an instructive precedent is also a positive affect because it supports my own aesthetic selections; I felt that it satisfied my desire to produce an unconventional architectonic aesthetic response, as discussed above (23: Aviary aesthetic). Furthermore it responded to an understanding gained during the project that there could be a requirement for a bat house to include an internal, protected space for flying (20: Bat affects – volume).

The second precedent we discovered in our research was a built bat house that expressed the current, pragmatic and conservative approach to bat house design. The form of content of these drawings, which sought to provide affective capacities to the bats, was a repetition of the habitats in which bats had been found. As such this bat house might be seen as representational rather than affective, but whilst it literally copies a house it also copies the precise situations in which bats have actually been found – in lofts and cellars, under tiled roofs and in brick cavities. Although based on a recording of effects, it may also enable knowledge of affects in a move from the first kind of knowledge of indications into the second, common notions. The precedent serves to express the fact that almost all we know of bats has been learned by disturbing them, inhabiting their territory and obliging them to adapt to us or use our discarded environments, and in this sense the drawing is diagrammatic; it creates a system of formal differentiation, which enables the redistribution and convergence of a range of different relations

of affect (Deleuze 1988: 77). It may be seen that the diagram of affect of this precedent is shared with the diagram D2 (27: Heterogeneous environments). The knowledge that it redistributes was, for us, understood as the provision of heterogeneous environments meeting the needs of multiple and particular bat species: some need a space in which to learn to fly ('flyspace'), some like to hibernate in damp cellars, and roosts tend to occur in different environmental conditions according to species and activity (such as feeding or maternity).

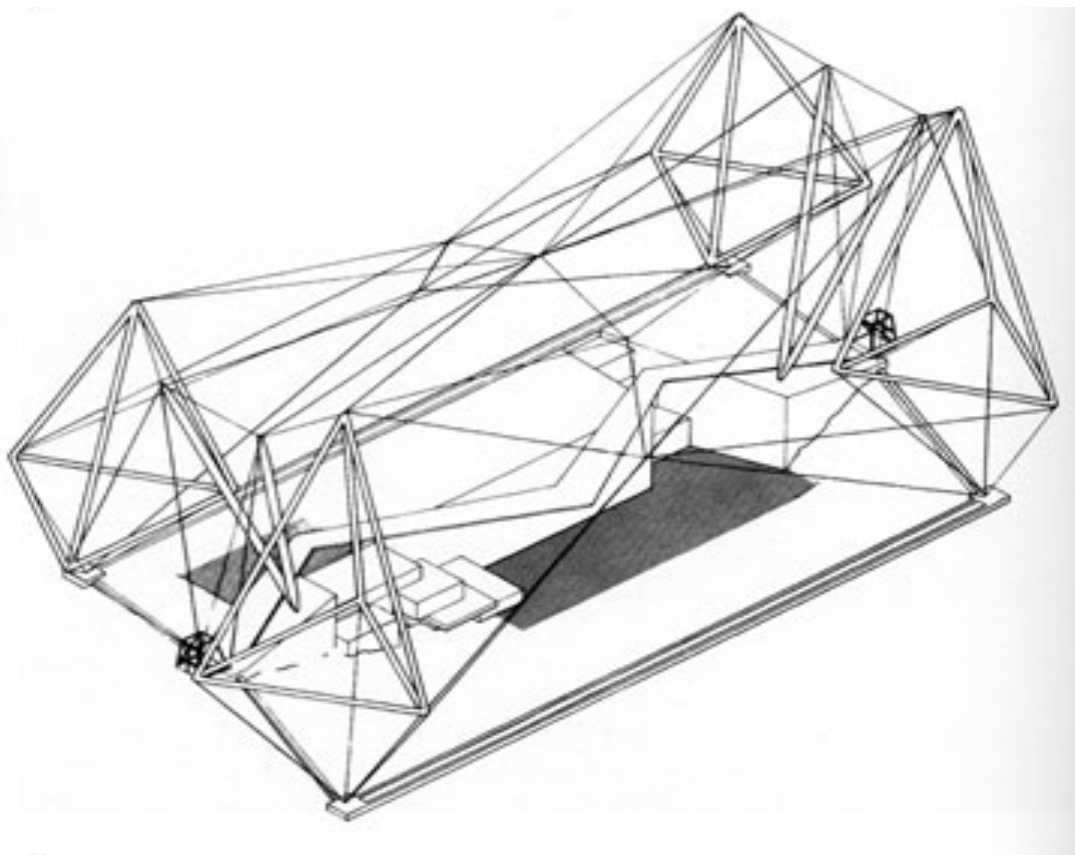


Figure 43\_  
Cedric Price's Aviary for Regents Park Zoo  
(Price 2003: 32)

Whilst even this conservative precedent has a diagrammatic quality in its form of content, it reintegrates the divergent affects it comprehends in a conservative form of expression based on its perception of the limits of its knowledge of the mechanism of those affects. For example, we know that

Pipestrelle bats favour small crevices for roosts, yet we only know this from finding them between bricks and roof tiles. The precise conditions which make such situations a positive affect are difficult to intuit from the affective encounters that ecologists have hitherto managed. The precedent therefore represents the civil state of common notions – knowledge of what works, but not necessarily of why. It serves as a reminder of how cautious the ecological profession feels it needs to be in attempting to generate conditions for bat roosting (how its knowledge remains limited to common notions and the civil state), and this was ultimately influential in the resolution of our design as we took a more conservative approach in order to ensure we would be able to encourage roosting.

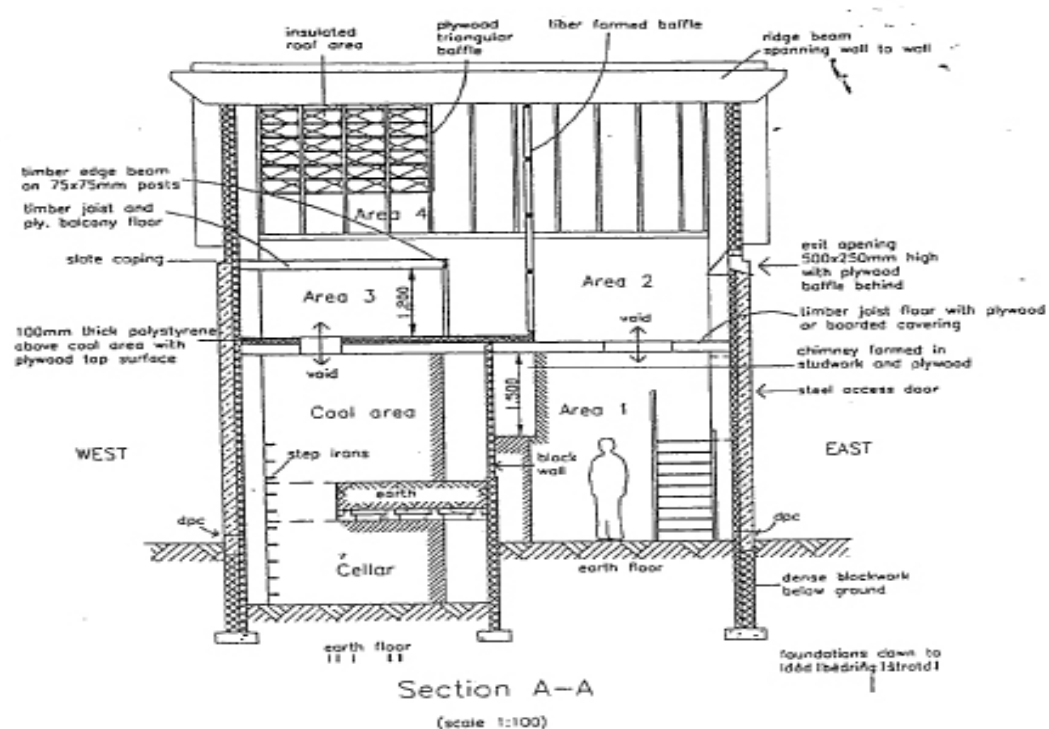
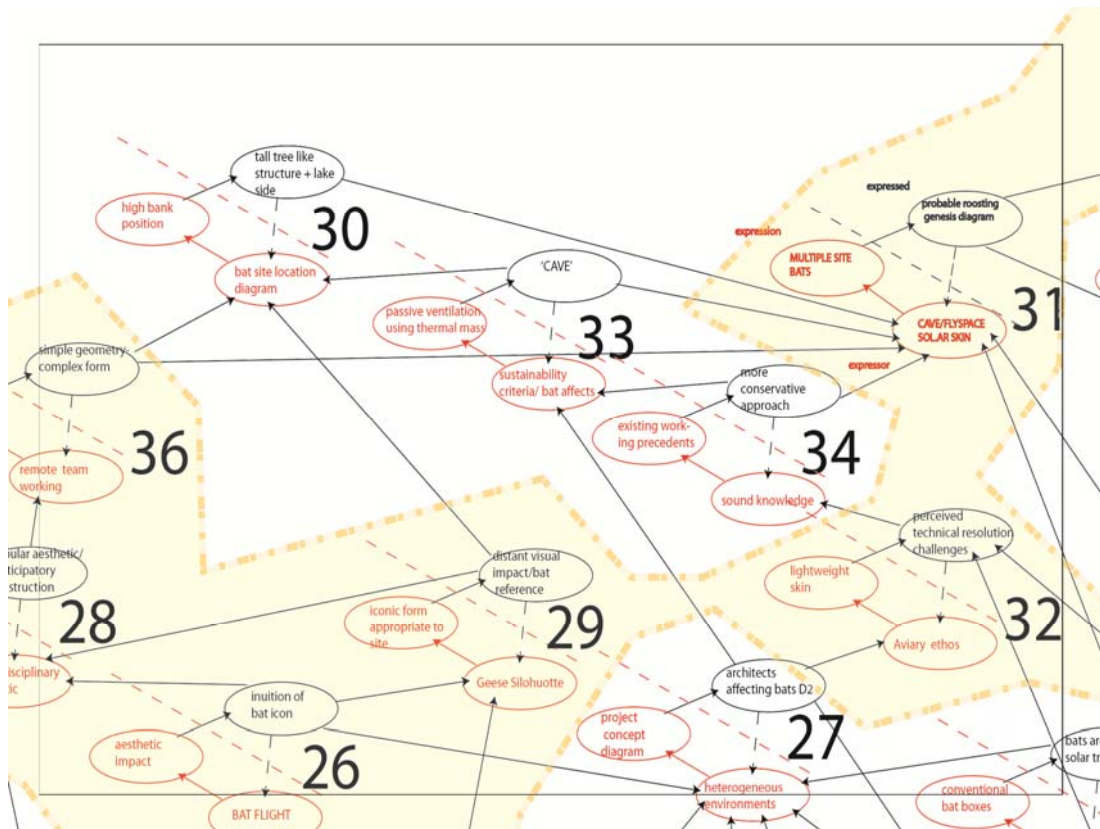


Figure 44\_  
Precedent drawing of a built bat house  
(Wells 2007)



## Serial compositions / logics of sense

**36: Remote**

Affecting 31: Probable roosting

Affected by 28: Popular aesthetic / 34: Sound knowledge

**31: Genesis diagram**

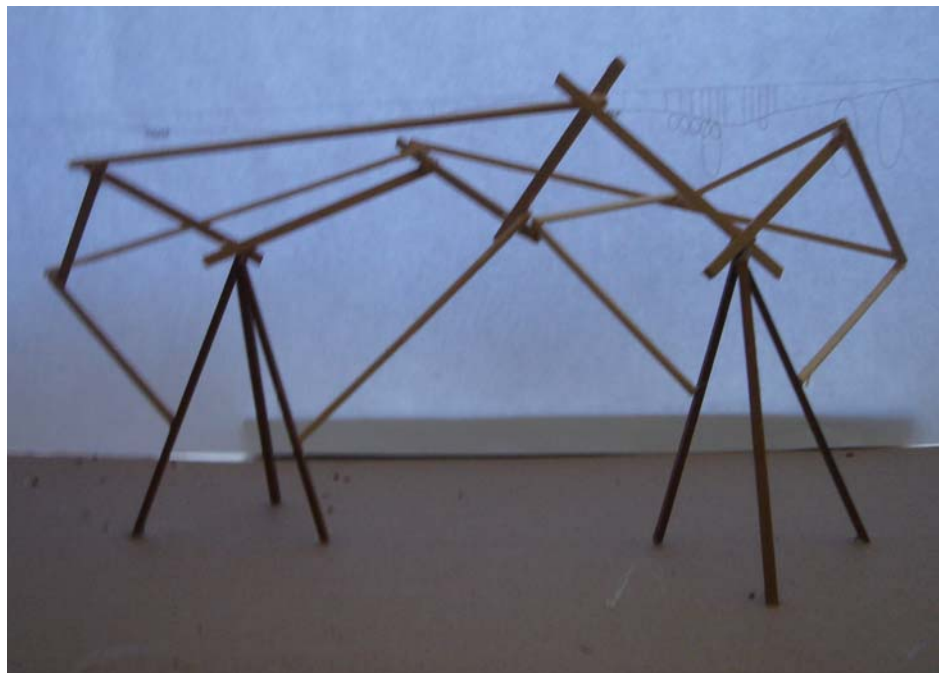
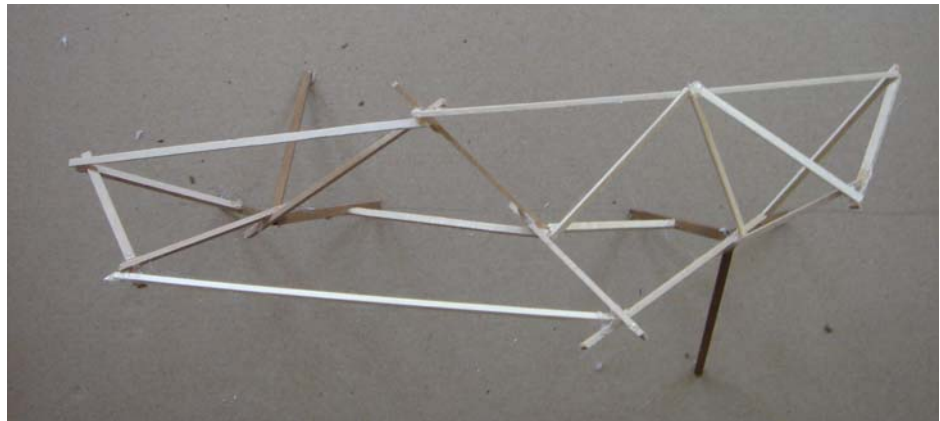
Affecting 11: What is good for bats / 17: Selection diagram / 18: Design resolution / 39: Inelegance

Affected by 24: Participatory aesthetic / 25: Bats are agents / 30: Cave / 33: Conservative approach / 34: Tree structure

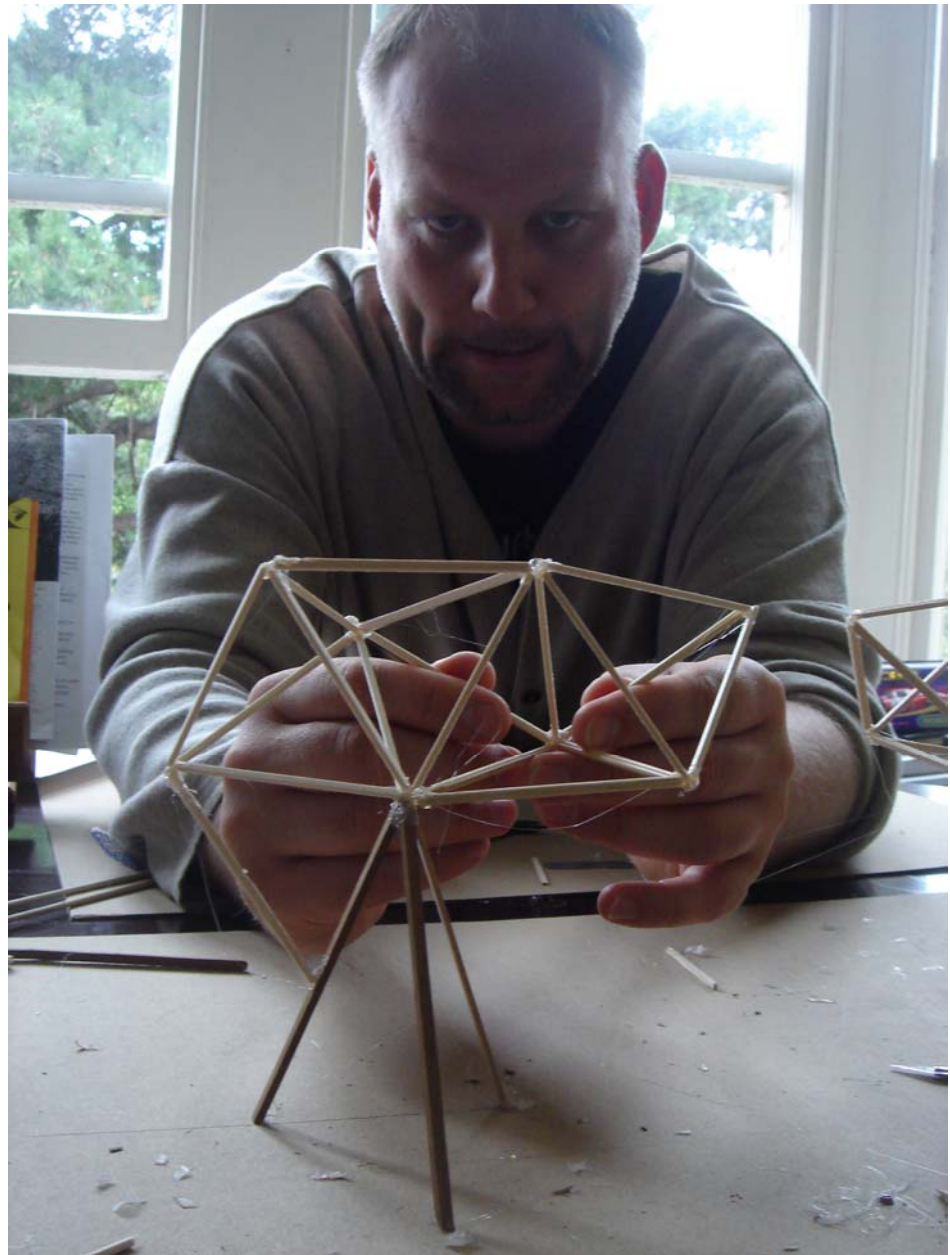
The following series of models was produced collaboratively with the landscape architect, together building, discussing and adjusting the models in order to enable team members to share the common notions of the project and to have a hand in realising their potential, since the landscape architect had been obliged to miss much of the first design team meeting. A first model simply attempted to make a three-dimensional version of

diagram D2, Figure 39 (27). The aviary-inspired diagram had indicated or expressed a particular construction technology and first thoughts were to investigate the use of ETFE<sup>108</sup> pillows in a steel sub-frame, but this approach had negative affects on the ecologist who felt that rain would cause too much noise and thus disturb the bats. In addition, the brief's requirement for sustainable excellence suggested a passive, autonomous building, which had led us to incorporate a highly thermal massive structure – essentially a 'cave' – as a way of creating the appropriate environmental conditions for hibernation. The precedents we looked at also had the affect of suggesting more traditional building materials in order to create successful roosting conditions (34: Sound knowledge). The landscape architect suggested a formal precedent for the 'cave' structure, which could potentially be constructed locally and collaboratively: the Brother Klaus Field Chapel, Germany (Zumthor 2005) was created by the local farmers by such a process, and has the internal qualities of a semi-natural cave. This led to the idea that the frame structure should be constructed using generic technology such as a space frame, creating a template that could be constructed by relatively unskilled, local labour.

The next model in the series introduced a regular geometry that was affected by two concerns, one immediate and one that resulted in a subsequent reluctance to vary the design. The secondary affect on the progression of the form towards a simplified geometry was that the team worked remotely, using desk-top sharing software for meetings and email for the sharing of drawings. This affected the process of developing the design, in that the diagram D2 would have implied an entirely bespoke geometry and would have required a single point of control until an efficient way of describing it had been achieved, which in this case would have required a copy of the three-dimensional model – either physical or digital – from which to work. The simplified geometry theoretically allowed us to work independently on the same form, but even this presented a difficulty



**Figure 45\_**  
**Model 1**  
First stick model of Diagram D2, Plan and elevation



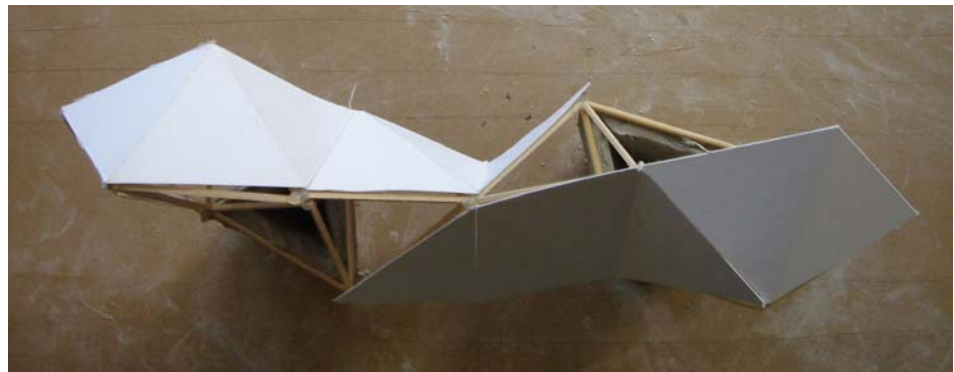
**Figure 46\_**  
**Model 2**  
Beginning of a simplification for replication  
(showing Jochen Rabe)

as at one point a slightly different version appeared in each of the separate camps due to a misinterpretation of the photographs of the physical models. This is an example of the design process being limited to the composing bodies' capacity to be affected.

As may be seen from the examples given above, a wide variety of affects had an enduring impact on the design team. The introduction of a 'cave' (33), a simplified geometry (36), a participatory aesthetic (28) and a conservative approach to bat roosting (34), amongst many other affects, moved the design away from an immediate actualisation of the concept diagram D2 (27). This new trajectory was expressed in a 'genesis diagram', Figures 49 and 50 (31) that attempted to incorporate these other affects in an approach that nevertheless retained the diagrammatic potential of D2 (27). This was achieved by the production of a process model, which was used to show that the design could be replicated, would meet sustainability requirements, and would have a high probability of encouraging roosting, breeding and hibernation for a wide range of bat species. The genesis diagram attempted to retain its diagrammatic potential by expressing these positive affects through an articulation of the system of differentiation that enabled their integration. It expressed a design with the same diagram as D2, but also expressed a more conservative form of determination or resolution: a diagram of the design itself.

The genesis diagram was intended to enable the judging panel to understand that the design could be reproduced by non-architects, in a presentation that demonstrated the logic of assembly of different elements and the selection process of the forms taken by those elements. The final presentation did not make the purpose of the diagram as clear as it could have been, as this realisation of its purpose in the process is the product of reflection. The presentation of the diagrammatic knowledge of the design

was partially sacrificed in order to produce a different set of affects: professional design resolution (39/40). The pressure to finish the design in order to produce a professional product came mostly from ourselves, whilst being an affect that we imagined was produced externally – the requirements of the competition.



**Figure 47\_**  
**Model 3**  
Introduction of heavyweight element and first skin



**Figure 48\_**  
**Bruder Klaus Field Chapel, Peter Zumthor 2005**  
(photograph Jochen Rabe)



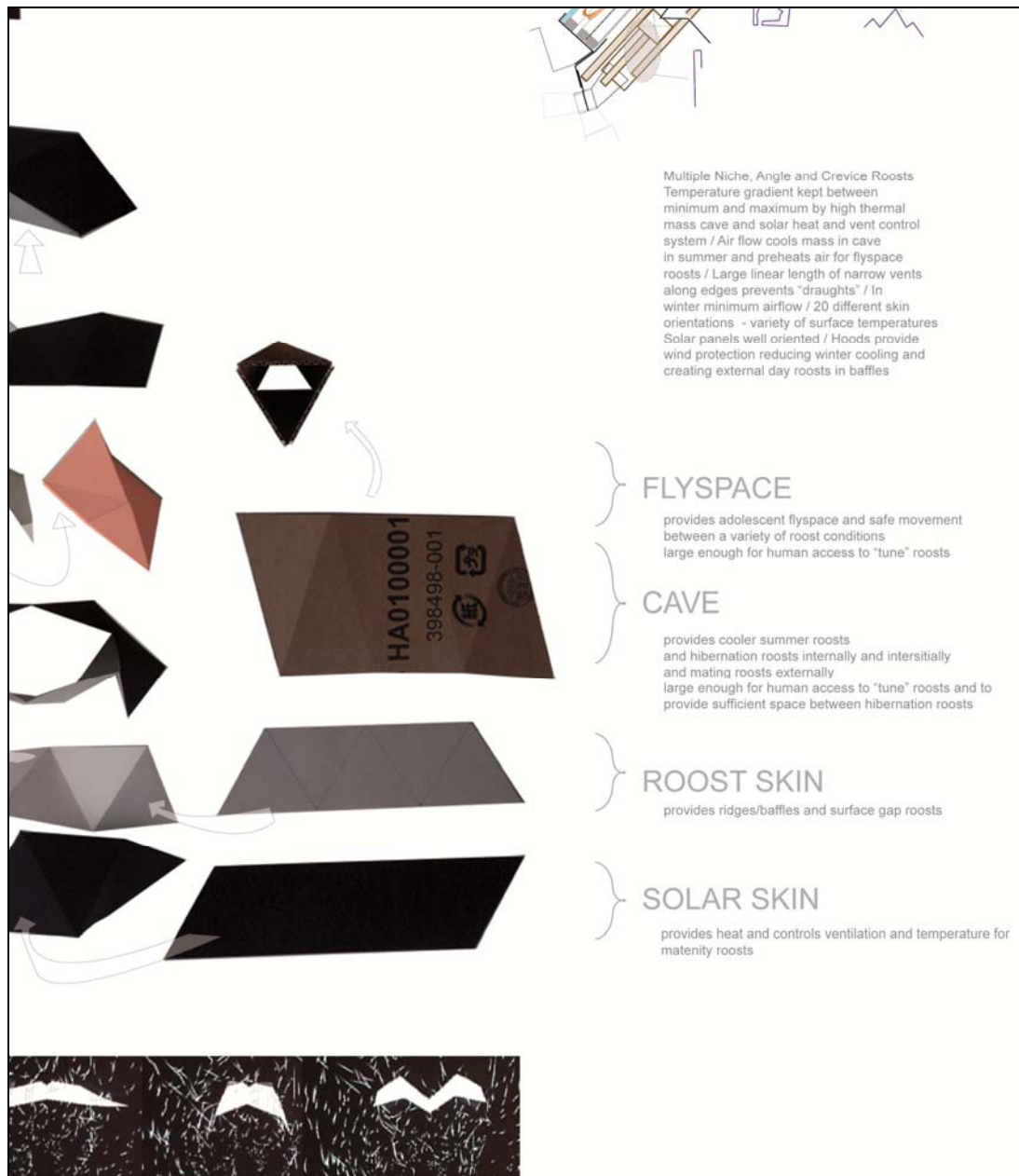


Figure 49\_  
Genesis diagram detail



Figure 50\_  
Genesis diagram



### 3 Specifying affects

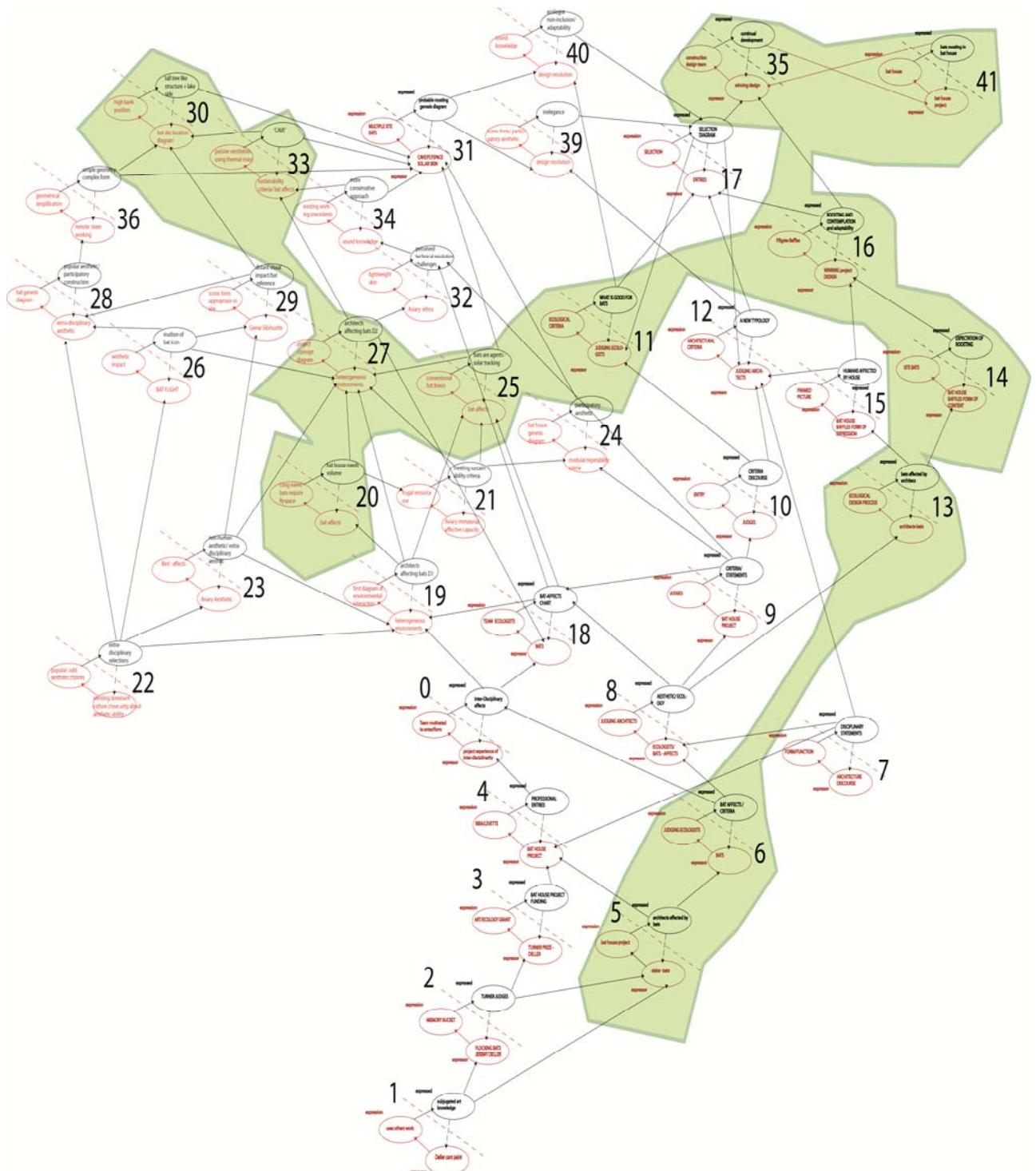
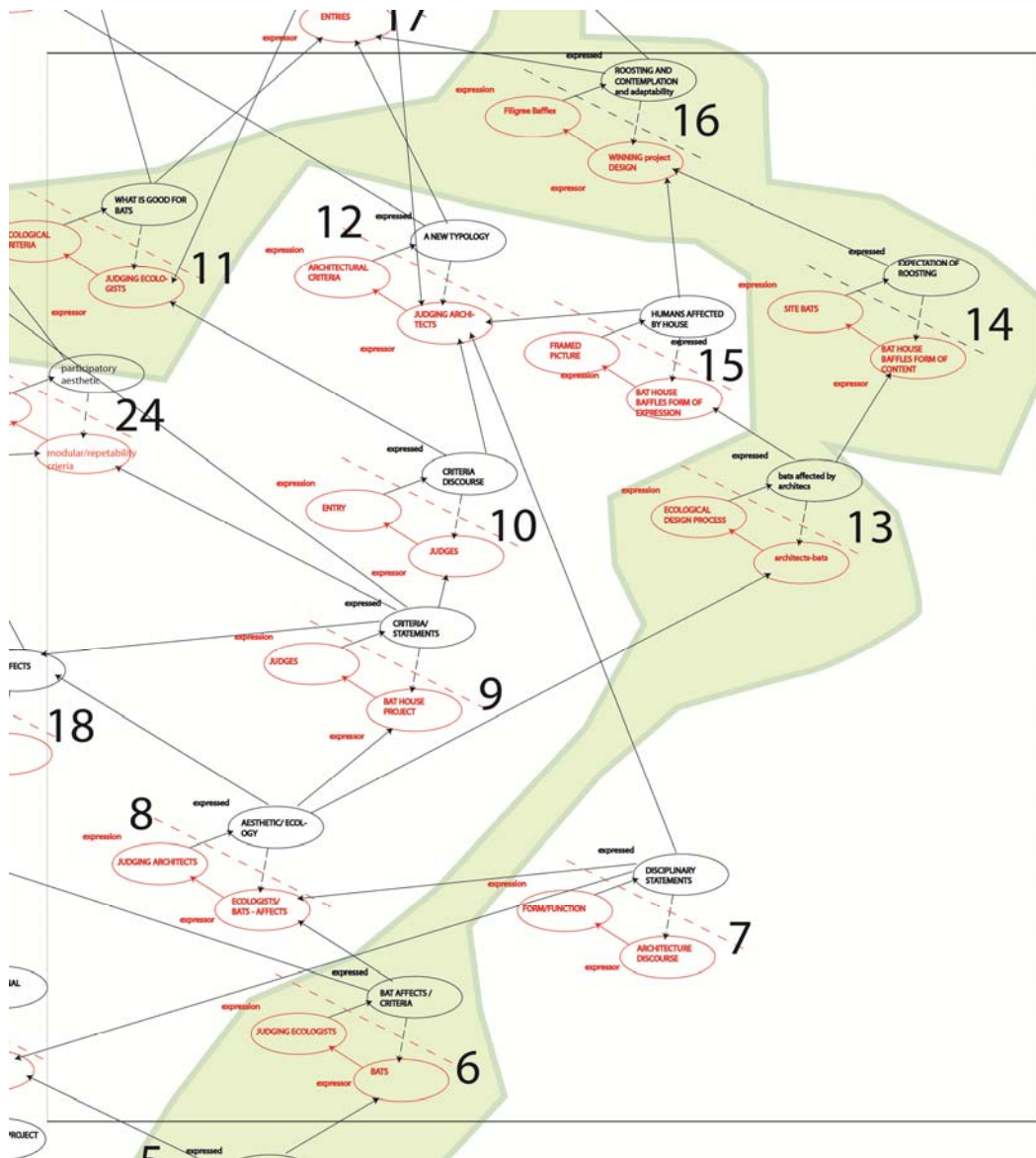


Figure 51\_  
Diagram of affect of BHP, bats

## Encountering the user



### 5: Bat House Project

Affecting 4: Bat House Project / 6: Bat-affects criteria

Affected by 1: Subjugated art knowledges

### 6: Bats

Affecting 0: Interdisciplinary affects / 8: Ecological aesthetic

Affected by 5: Architects affected by bats

### 13 Architect-bats

Affecting 14: Bat house baffles – form of expression / 15: Bat house baffles – form of content

Affected by 8: Ecological aesthetic

#### **14 Baffles content – Roosting**

Affecting 17: Selection diagram / 35: Continual development

Affected by 14: Humans affected by house / 15: Expectation of roosting

#### **15 Baffles expression**

Affecting 12: A new typology / 16: Roosting, contemplation, adaptability

Affected by 13: Architects-bats

#### **16 Adaptability**

Affecting 17: Selection diagram / 35: Continual development

Affected by 14: Humans affected by house / 15: Expectation of roosting

In the Bat House Project, Deller's ambition is interventionist: 'the competition is a way of getting architects to think about bats' (Deller 2008). The power of Deller's artistic diagram to direct the subjectivities involved in the Bat House Competition gives expression to an endangered and almost invisible minority by composing various bodies with the 'bats': Deller himself, art, architects, students, schoolchildren, the general public, ecologists. None of these compositions, however, is automatically affective or diagrammatic – not 'already social'<sup>109</sup> – but all are more or less affective, more or less active, producing different kinds of knowledge as they are embodied and enacted, depending on how the bodies involved are open to be affected, and what affects they are capable of.

The genus Chiroptera consists of approximately 1,000 species worldwide, most of which are either classified as endangered or threatened with extinction. Each has very different sensory adaptations but all are easily disturbed by light and noise. Our knowledge of bats is most commonly generated by compositions that annoy them, and this creates a challenge for bat ecologists to come to know something about what affects them. The architects in the competition or the judging panel (8: Aesthetics/ecology) are therefore affected by bats through the chain of affect of expressions of bodies in relation with bats: personalities, words, gestures, drawings,

models, sites, precedents, films and sounds. It is through the affects on us of the expressions of these bodies that we move beyond imaginations and signs – scary, evil, unknown – to form common notions of bat-affects – Brown Long-eared bats seem to like a protected flyspace for their juveniles, for example – enabling diagrammatic knowledge of how to compose with them and design a new bat house that they will actually inhabit. When Deller actively affects others in the compositions he instigates, this requires that he too be open to be affected by both architects and ecologists, and that the architects and experts on the panel and in the competition teams be open to one another (6: Judging ecologists).

It looked like nothing else that had been designed [...] it wasn't a building for humans in any respect [...] they were just thinking about the client being the bat rather than us being impressed by something.

(Deller 2008)

According to Deller, the quality that made the overall winner stand out in the competition was that it appeared to be designed as if exclusively for bats. Rather than merely being affected by the human aesthetic of the project, the winning team are shown to have thought about and interacted with bats through a design that is positively affective for bats – ensuring successful roosting. At the time of judging, the latter distinction depends on the intuition of the ecologists, and the affect of Deller's statement is to insist on the primary objective of the project – to have architects think about bats means the bats must be made to feel at home, and to the ecologists this means that the design must be 'adaptable'.

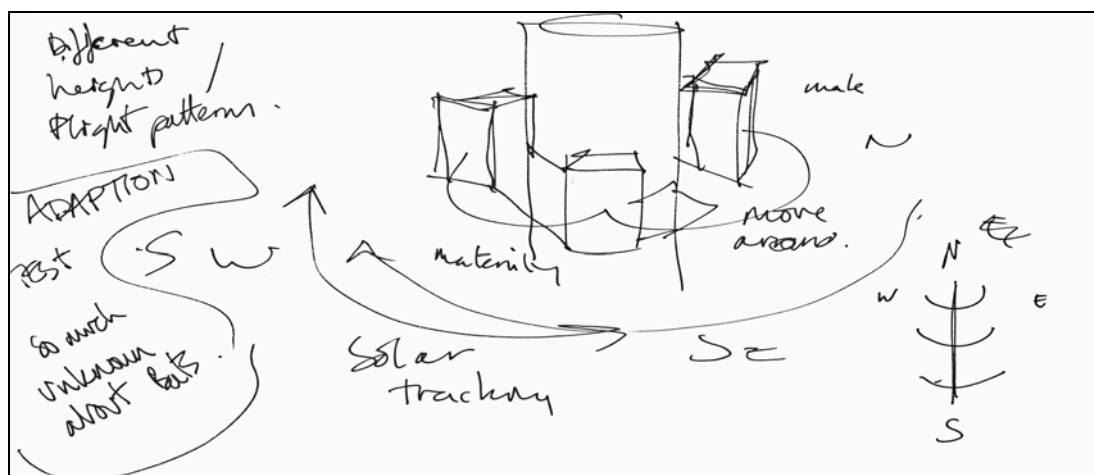
The winning design has a decorative facade of machine-cut filigree panels or 'baffles' situated within a white box, likened to a 'picture frame'. From the judges' perspective these baffles have a form of expression – embodied

power – which affects humans with a sense of 'beauty'. In addition, the baffles have a form of content which the ecologist judges believe constitutes an agreeable composition with bats – an assembling of material of the right size and shape for roosting. More precisely, the ecologist judges believe the baffles will form an agreeable composition with ecologists in the field in order to subsequently compose with bats (adaptability). However, the baffles *must* also have the aesthetic to affect the bats to choose to compose with it. Bats and humans both experience the object aesthetically – the bats must have an 'aesthetic' sense of what a good roost looks like, for how else would they ever select one? We may only speculate about the parameters of the logic of sense of bats, but the implicit assumption of the competition's distinction between beauty and practicality, with humans on one side and bats on the other (cultured architect and apparent user), is that bats have some sort of innate or natural sense of appropriateness based entirely on a physical interaction, which cannot be described as 'aesthetic' because they are not as 'advanced' as humans. The architect judges' expertise – the selection of elegance – is in fact a social and political function aiming to provide beauty for 'human contemplation', but the notion of beauty is invoked as a transcendent goal. For the judging architects this is the function of the discipline, and constitutes its boundary of expertise; for example, Amanda Levette recently called for architects to be the final arbiters of quality in an architectural supreme court, saying: 'Experience, talent and intellect allow people to be judgmental in a positive and confident manner' (Levete 2010).

For the winning bat house successfully to encourage roosting, the embodied power of the filigree panels must affect the bats to select them as home, as part of a composition with a much greater whole, not divided according to functions applicable to identifiable species but according to species of affect. For example, during our competition research we established that regardless of the form of the baffles, no Pipistrelles will use them if they are not

amongst trees, nor any Daubetons unless very near water.<sup>110</sup> The bat house would be irrelevant if the particular species on which the winner chose to focus did not already inhabit the site. Embodied powers constitute a system of affective selection – the agency of bats is an active force, not just a representation – and bats will 'vote with their wings' (BHP 2007).

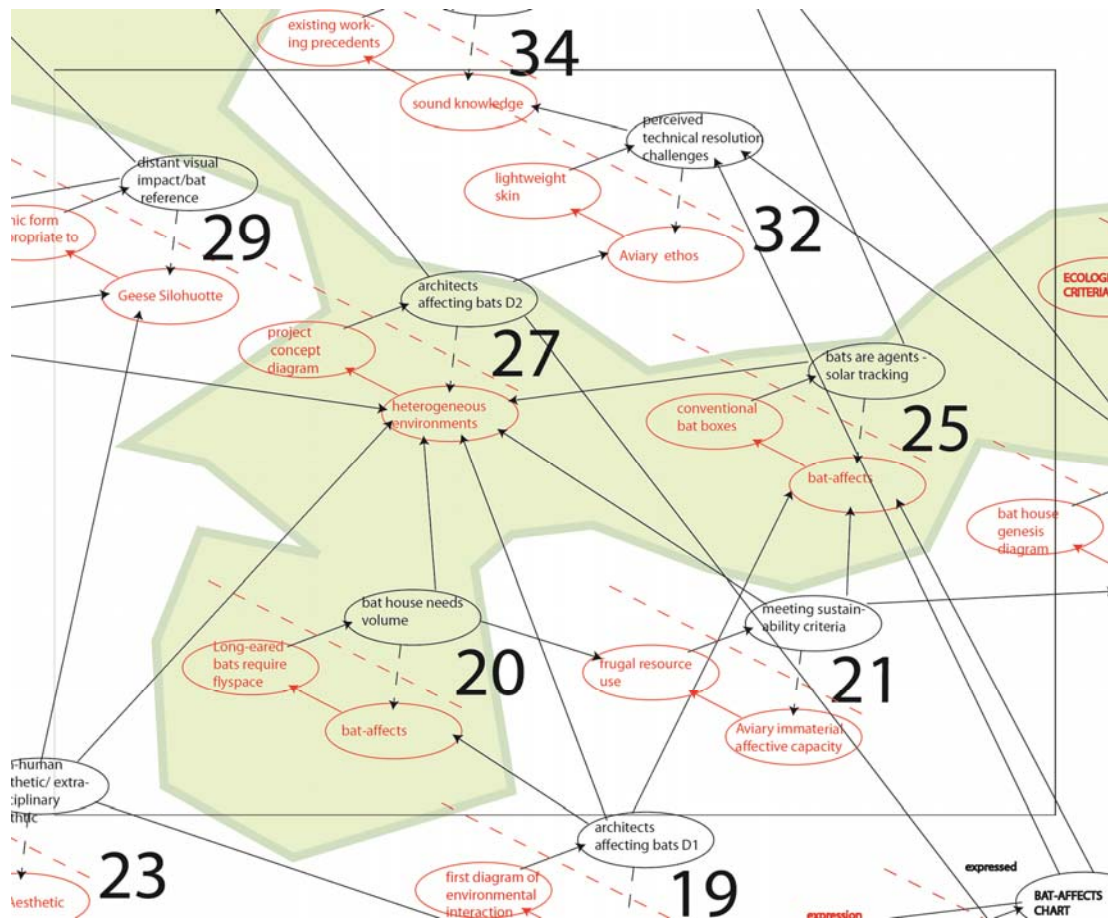
In this situation, bats are represented on the judging panel by the bat experts and ecologists working with the design teams, whilst human needs are represented by the judges and architects in the teams. The idea of the bats expressing their preferences in an existential manner is a demand that the bat representatives have some kind of real interaction with their Chiropteran denizens. Here, the ecologists provide an empirically derived judgement of such interactions, understood as a continuing process of negotiation with the bats, but the final judgement of human perceptions is made in the acculturated assessment of the judging panel, based on talent and confidence. Aesthetics in this sense is predominantly a representational discourse wherein perceptions of beauty are a matter of expertise rather than actual affect.



**Figure 52\_**  
**Bat solar tracking**

Drawing showing an architect coming to understand bats move roosts in order to track the sun

## Negotiating form / forms of negotiation

**20: Bat-affects – flyspace**

Affecting 31: Probable roosting

Affected by 18/25: Bat-affects criteria / Bats are agents

**25: Bat-affects – agents**

Affecting 27/31: Architects affecting bats D2 / Probable roosting

Affected by 18/19/21: Bat-affects-chart / Architects affecting bats D1 / Meeting sustainability criteria

**27: Heterogeneous environments**

Affecting 32: Technical resolution / 33: Cave

Affected by 20: Bat house volume / 20: Sustainability criteria / 21: Extra-disciplinary aesthetic / 25: Bats are agents / 26: Bat icon / 29: Distant visual impact

The use of the Cedric Price aviary precedent was invoked at a moment in the design process when I realised that adolescent Long-eared bats especially

benefit from a safe interior (which I called a 'flyspace') whilst learning to fly (20). This particular realisation was important to the potential of architectonic expression in the project as a wider icon in the park (29) because it gave the bat house a voluminous element, whereas most of the other requirements could be met by extremely small constructions – 'crevices' and 'niches'. This realisation was produced by the affect of interdisciplinary conversations with the ecologists and the digestion of written materials regarding the different requirements of species we had identified as inhabiting the wider site. We actively sought this particular affect in the emerging design, indeed we desired to find such an affect in the literature in order to make a voluminous architectural form. The realisation that a flyspace was required was therefore seen by myself as a mutually positive affect and was selected from many potential bat-affects produced through the interactions with the ecologists, but it was also seen in terms of what my intuition suggested would be required to affect the architectural judges on the panel. This serves to demonstrate how engagements are not automatically affective but have to be selected by a body open to be affected by them. However, this may risk a return to the civil state of reason if being open becomes a search for an axiomatic representation that reinforces ones presuppositions rather than a problematic challenge to those presuppositions. In this case, the affect was considered also positive and creative for the bats (25: Bats are agents – see below) and enabled our design to potentially affect multiple species, offering a creative selection of roosting places in a manner similar to the engagement of the user with the multiple paths in the Kunsthall (Hill 2003: 50).

Therefore, whilst an initial interdisciplinary design team meeting enabled the formation of common notions – mutually affective strategies for action – between the ecologist and the architects, more complex understandings of the supplied ecological information were not automatically produced. A face-to-face meeting and discussion of the information merely enabled an



on-going process of attempting to correlate the bat-affects that might be produced in an emerging design with the process of understanding what those affects actually were. For example, the comprehension of affect 25 (Bats are agents) did not come about by being told or 'informed' but through recognising that existing bat boxes<sup>111</sup> were typically placed in groups of three around the trunk of a tree to allow bats to move between them and thereby select the internal temperature best suited to prevailing climatic conditions – bats actively compose themselves with the environment. I drew Figure 52 to explicitly recognise that affective moment, but also to articulate a further affect that the diagram of affect between bat-boxes and bats produced, namely that bats move roosts in response to solar warming (21: Meeting sustainability criteria). This principle informed the design of the solar skin of our bat house. The positive affect on me which enabled my being open to this was that it produced a logic for a relationship between bat-affects and bat-house orientation. This relates to a positive affect on my personal diagram, since it enabled the production of a design that used and demonstrated my expertise in climatic design (23: Aviary aesthetic). This affect illustrates how the ecologist's expressions of potential bat-affects had to be openly received by the design team in order to move beyond indications of 'something to do with bats' to rules for the realisation of powers or common notions which could then be employed intuitively in the creation of a bat-house with a high probability of being roosted.

This was therefore the rule for a realisation of powers: ensure that we ascribe agency to the bats and produce a variety of environments that the bats may choose to inhabit – providing what is good for bats. This more complex understanding of the conventional idea of a bat box makes a distinction between a simple representation of a roost environment not designed according to the affect it may have on bats but merely on the recording of the effect/correlation between bats and similar types of roost, and the use of these same artificial roosts positively to affect the bats by

enabling further elaboration on the part of the bat. The decision to move beyond a representational understanding of bat roosts and generate a design on the basis of a comprehension of bat-affects is a diagrammatic form of knowledge expressed in a new composition that provides the same affects but does not resemble current provisions: a repetition of difference. At this stage of the design it was expressed in what became the project concept diagram, which was actually produced at the end of the first interdisciplinary design meeting – Figure 39 (27: Heterogeneous environments).

This diagram was produced by an architect for an architectural design audience. It attempted to respond to the initial diagram's call for sectional variation (19), the requirement for flyspace volumes (20) and the understanding of bats as agents engaged in solar tracking (25). It was also inspired by the movement models of bat flight (26) and Cedric Price's aviary (23). The diagram represents a desire to provide a large variation of temporally appropriate environments which would have more or less positive affects dependent on momentary climatic conditions, controlling a relationship to the external environment but in a diverse manner that enabled different bat species pursuing different activities at different times of the year to select pleasing compositions with the structure. Its openness to being affected by external conditions is employed as a positive affect, promoting the active engagement of bats with the structure over time.

The diagram describes three different zones, which intersect and thereby produce a larger variety of habitats. The grey area indicates a heavy thermal mass with maximum enclosure and darkness, the purple a dark space with less environmental control. The white area between them frames a less controlled condition, being only partially enclosed. The overlap between these areas indicates a variety of ambiguous territories designed to increase the diversity of conditions and to vary the intensity of the conditions which

are prescribed. In terms of attempting to remain open to the external environment, this diagram shares arguments (landscape not building and sectional variation) with the first (19: Diagram D1), but with the added criteria of a spatial volume or 'flyspace' that enabled it to be formed as an architectonic whole – affected by the bat flight images and the notion of an iconic form.

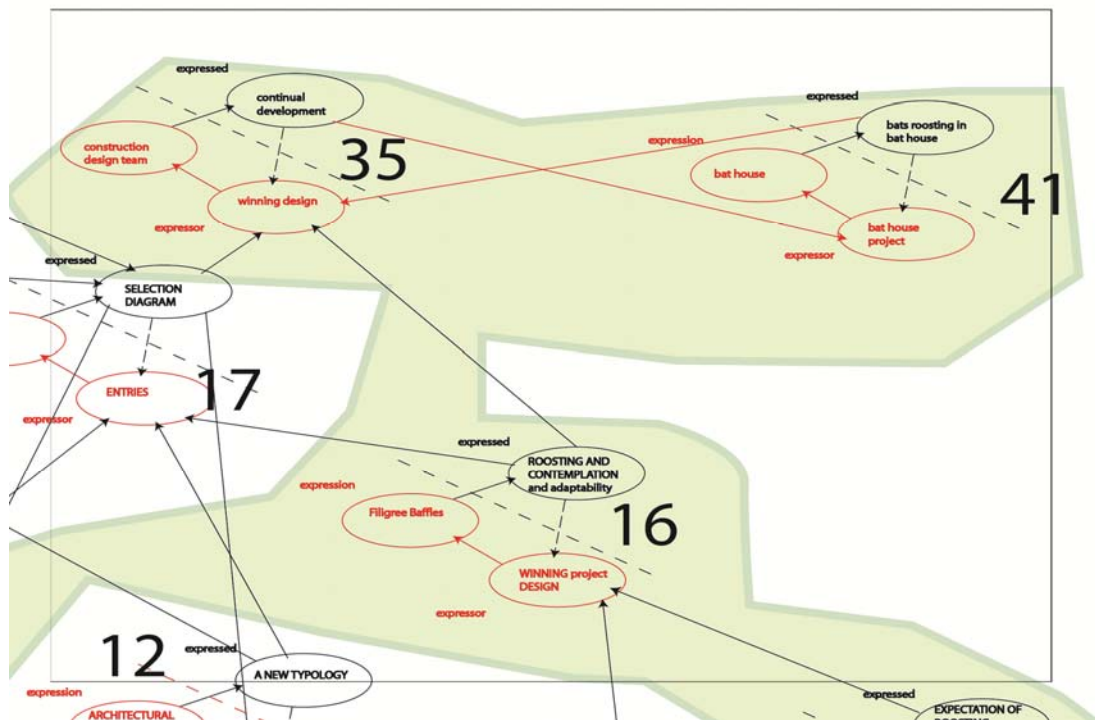
The diagram was also specifically architectonic in that it was drawn to show that these requirements, which suggested a complex form, could be realised geometrically – a random construction was drawn and then translated to a plan. Here the colours indicate three overlapping territorial conditions that are related to three-dimensional spaces by each triangle in plan and section, understood as forming tetrahedra. In this sense the diagram enables diagrammatic knowledge, in that it is not in itself a determination of form but enables determinability by expressing geometrical common notions about extensive organisations in relation to rules for the realisation of powers. However, whilst this may be a capability enabled by the diagram, a form of organisation is predominantly a symbolic or mental engagement with the form of expression of the affective body (to an architect interpreting its content as geometrical codes of projection) because it is interpretable according to reason (mental symbol processing) rather than intuition (of the relations between affects).

The form of expression of this diagram is affected by the form of the bat flight images and the form of the Price aviary; it is intended to express an atmosphere of 'batness' – a project-specific positive affect on a contemplating audience – whilst at the same time attempting to produce positive affects for its potential inhabitants through coded suggestions of extensive organisations with the potential to form heterogeneous environmental conditions. The form of content of the diagram is expressive of an interdisciplinary practice that articulates human aesthetic affect as one

of a multiplicity of contingences, seeking the maximum integration. In this sense, the diagram creates a system of formal differentiation in order to enable the convergences of different affects. The differentiations are made between skin, cave, and flyspace as distinct spatio-technological assemblages, in the complexification of variation between them in the move from two dimensions to three, and (subsequently) temporally. These are the potential diagrammatic relations enabled by the embodied knowledge that forms the interior or content of the expression.

However, this knowledge was not entirely actualised in the project entry. Insofar as these affective potentials are also embodied within the physical construction of a bat house, the construction itself may also be considered diagrammatic. If a construction enables those bodies to interact with it in a non-habitual way and increase their potentials, then this produces diagrammatic knowledges – and this may also be true of bats insofar as they are able to operate outside of habitual responses. It is the potential of the production of affects in the 'users' of a final construction which is an embodied diagrammatic. The relationship between drawn 'diagrams' and the creation of such potential must be understood in the full political context of embodiment, otherwise the power relations it claims to affect are removed in favour of exchangeable representations.

## Species of Affect

**35: Winning design**

Affecting 41: Bats roosting in bat house

Affected by 16/17: Roosting, contemplation, adaptability / selection diagram

**41: Bat House Project**

Affected by 35: Dynamic affection

Affecting: The Chiropteran denizens of the Wetlands Centre?

What affects the ecologists must be a form of expression: for them, the bat requirements of the bat house are the expressive affective element whose content is the architectural structure and form. Here both the form of expression and the form of content of that expression are being valued, because the form of content for the architects is the form of expression for the ecologists and vice versa. What affected the bat experts was the potential to compose positively with various species of bats. What affected the architects was the potential to compose positively with various 'species' of humans. The focus is on different species of affects, not on different aspects of existence, whether intelligible essences (beauty) or sensible

appearances (practicalities). This situation is demonstrated most keenly in the continued development of the winning design with a team of sustainability and ecological experts, and the appreciation by the winning team that a key affect of their design on the judging panel was its adaptability.

Undoubtedly, the scheme's adaptability had played a role in getting people involved. Without drastically altering the design, bat experts could implement the desired bat features, and the engineers could try out techniques for sustainable building.

(Tandberg 2009)

However, this adaptability also reiterates the fact that deciding and providing 'what is good for bats' is actually an ongoing process of collaboration that must remain open to further input from bat experts. Whilst it seems that the aesthetics of the project are left to the transcendent architects, where 'what is good for people to see' (or 'Beauty') is a judgement that the architects are perfectly able to make based on their talent, expertise, experience and positivity, 'what is good for bats' remains a problematic which needs to be discovered. In the hindsight enabled by this account of our project, the requirement of the competition brief to create an engagement between humans and bats could have been seen in terms of this continuing openness; for example, our design could have acted more explicitly towards engaging volunteers to build and tailor the construction, whilst ensuring that it could cheaply be replicated throughout the country. In this way the diagrammatic, affective knowledge gained by encountering our outside – bats – would be as widely and deeply shared as possible.

The Bat House Project manages 'to make architects think about bats' because of an external impetus provided from an unusual source,

demanding unusual interactions. Its success, providing a house that bats will actually occupy, is only possible because of these interactions, and they are in fact never finished, requiring a continuing conversation between the bats and the ecologists. An emphasis on bats in the functional narrative is not here an ethical move made by the architects' goodwill to match their good sense, it is made necessary by the unusual nature of the client (the bats). Here the client is radically indeterminate, conceptually and actually nomadic. 'What is good for bats' is not determinable into functions or practical things in any simple manner. Bat requirements are just as indeterminate as human requirements but, as this project demonstrates, they are not yet subject to regimes of reduction that represent them as typologies. They have a resistant quality because they are not affected by discourses of function or need, and may only be considered at all through collaboration. Knowing what affects the bats will actively select is a diagrammatic problem or negotiation, which cannot be solved by finding something to which bats are obliged to adapt by environmental scarcity; adequate knowledges are actively shared. Whilst the architects suggested we produce new typologies, the bat experts were concerned with what was good for bats. The segmentation of design expertise into either a functional determination and/or an aesthetic divination alienates the user by doubly reducing their power – first as affective agents and second as arbiters of taste.

It is not therefore a case of designing a building to have a desired affect: this is a reinstitution of the form-function model and tends to result in an emphasis on the mastery of aesthetic affects in humans with the power to judge them. It is instead the case that we should be designing a process to enable multiple desires to be affective. An affective design process is one whereby the users are no longer understood as more or less participating in a more or less collaborative process, but constitute it through mutual and continual dynamic affection. How a designer acts to modulate the potential of their existence produces both the consequences of the kind of affects

they produce on others and the kind of affects they can take. The ethics of a designing body's actions and the aesthetics of its expressions are therefore never separately articulated but are instead a style of production of the diagram of affect that directs the body to produce those expressions: a diagram of which the body may be more or less actively constitutive. Ultimately, conventional descriptions of the process avoid addressing these powers by focusing on maintaining an illusion of control and absolute determination that necessarily reduces the affects that may be felt and produced.

In the example described here, the design process is understood as a web of embodied interactions rather than a system of rational causal determinations. It demonstrates that the designer's power to act is determined and generated through these interactions or affective engagements. It is not produced by reducing or limiting them but results from intuitive knowledge of the interaction between multiple interactions. However, understanding design knowledge as constituted by such external interactions does not simply produce a different set of techniques for achieving successful designs (although they can be used as such) but rather creates an ethical position on architectural production. It promotes and desires a process of non-reductive aesthetic production that tends to consider all affective factors through productive engagements. Finally, the diagram of power of the competition is obvious – even in the midst of the disciplinary power of the architect, even during the insistence on particular aesthetic practices and the reduction of the client to a type, the ecologists love their bats. Ideas of determination of function and divination of beauty are twisted open by the power of this affection.

The study above does not deny the value and existence of architectural expertise, but objects, for example, to its obviation of the socio-cultural processes of taste-making and fashion in favour of promoting the illusion



that aesthetics is a struggle towards an eternal good. Such accounts impoverish our understanding of the nature of architectural expertise and knowledge by denying concrete examination of the power relations which enable their formation and of which they enable insight. The description of the affective moments of the competition show the design process as a series of glimpses, directed towards a relationship of cause and effect that remains indirect: the direction comes from the future and the past, from the coherence created by the present attempt and all previous ones condensed into that moment as a power of intuition. This means that the design process should be understood as an embodied receptive process of spontaneous interaction with other, external, powers – and that this is the source of its potential, power and knowledge.

## 6\_Projective encounters

MSA projects has an ethos of engaging in a process of conversation and interaction with the actual people concerned with or affected by the issues we tackle, in the belief that this will produce more relevant and problematic work than if we abstracted the site as physical entity, imagined its cultural import from the outside, or critiqued it without positive intent [...]. The desire for such pragmatic engagements is driven by the idea that sophisticated architecture is developed through the forming of relationships, and is not simply a matter of shape or proportion. We see the site of architecture as not just the physical boundary or “place” but including all of the people, communications and relations which give that place its significance.

(White 2008)

The previous five chapters have each produced an architectural encounter with key aspects of a Deleuzian epistemological approach in order to develop and propose five principles of a Deleuzian ‘projective’ design-research methodology. This chapter acts as a conclusion by drawing together key linkages between the individual chapters whilst describing how each of these five principles have been actively investigated and developed in a range of architectural design, research and pedagogic practices undertaken over the last seven years under the theme of ‘Sharing the City’ by the staff and students of the Manchester School of Architecture, Masters of Architecture (MArch) ‘Projects’ atelier. Each ‘principle’ is articulated in terms of three aspects of a dynamic, embodied epistemology - first, in terms of how it is elucidated across each of the five preceding chapters, secondly in the context of examples where it was explored in a pedagogic environment,

and finally how it has been tested and applied through professional design-research practices.

The thesis is concluded in P6 '*critical diagrams, ethical joys*' by clarifying and re-iterating the argument that the serial production of affective relationships is a simultaneously ethical *and* aesthetical pursuit when it extends and shares the production of capabilities and powers of expression - *beyond* - the architect *and* their architectures. The chapter demonstrates through this structured linking argument, illustrated by examples developed and enacted *in parallel*, that this sixth dynamic, active and intuitive enabling ambition directs each preceding principle. Principle sixth explores how intentional, affective speculation into the future can be the springing point for creative joy, enabling us to make sense of any sequence of *projective* activities - by inevitably and deliberately, placing ourselves in their 'middle'.

The post-graduate MArch course at the Manchester School of Architecture, in which the MSA Projects atelier is situated, provides exemption from the Royal Institute of British Architects (RIBA) part II exam which can lead on to qualification as a registered – titled – Architect in the UK. The MArch course offers 6-8 Ateliers that address a broad range of architectural interests ranging from computational experimentation to conservation. MSA Projects is promoted as addressing the need to construct a plausible relationship 'between architecture and the social' (Koolhaas and de Graff 2009) with an urban design perspective. The practices in which the notion of 'project' are invoked here, involve a variety of dimensions of engagement outside of the school. These include staff acting in both a professional architectural and academic capacity (myself and my teaching partner Helen Aston) and the students of the Projects group (MSAp) acting as architects *and* citizens. In these capacities we have provided expertise in interdisciplinary research, for example with Professor Christopher Phillipson, a Social Gerontologist at the

University of Manchester (UoM); collaborated with local government partners, for example with the Valuing Older People team (VOP) at Manchester City Council (MCC); and explored shared concerns with a number of third sector social agencies and a large number of residents of Greater Manchester, examples of which are documented in a series of year book and exhibition catalogue publications as well as in a project website.<sup>112</sup>

These multiple engagements with stakeholders both affecting and affected by the development of the city have contributed to a varied exploration of 'inclusive' urban design practices by the Projects atelier, which has developed into an enduring theme of 'the Shared City'. This theme acts as a short hand for work conducted around an 'inclusive' participatory urban design-research methodology, which both affects and is informed by the work within the atelier and its parallel, external professional research practices.

This final chapter therefore discusses a range of architectural design, research and pedagogic practices to explicate the potential and appropriateness of a Deleuzian design-research methodology for architecture and lead to the production of strategic and intuitive – projective architectural – knowledges. It summarises the attempt of the document to demonstrate the consequences of understanding the coincident nature of being and knowing in terms of an active process of distinction making between bodies driven by the opportunity to increase their capacity. It considers each of the preceding five chapters in terms of how the principles they articulate have been enacted or expressed in both pedagogy and research in three stages; firstly through concluding the terms by which they have been demonstrated in the previous chapters; secondly by describing how they have been applied and expressed through the pedagogic practices of the MSA projects atelier and thirdly; indicating how they currently operate

as a diagram for inclusive urban design-research projects undertaken by its staff and students. This chapter discusses each of the five principles from the perspective of a final, overarching (sixth) principle of an expressionist epistemology: that joyful, ethical, relationships are created through positive, speculative practices.

## P1 The architectural project

Indicates that a (specific) architectural body is understood to be produced entirely by real (projective) relations made external to itself.

### Principle 1 \_ Real

#### Expressionism in the architectural project

Deleuze argues that predominant, traditional representational structures of thought and conduct act only as a stand in for a more adequate understanding of real thought and life. For him, *really* thinking always involves the whole body, and understanding thought as embodied requires a new - expressionist - way of thinking about thinking. Deleuze's expressionist alternative relegates nominal distinctions between intellectual representations of subject and objects in order to begin with the reality of the *relations between* subjects and objects, arguing that it is these relationships that constitute the distinctions which produce the entirety of the being of those same subjects and objects. This first principle of an expressionist epistemology holds that only intellectual distinctions or judgements that have a corresponding distinction in material actuality may be understood as real. This is to say, such affective or projective relations are both considered external to their terms (i.e. they are the relations between

those bodies, not contained within them as essences or inherent properties) but also *to constitute or produce them*. In this relational understanding the dualist dyads of subject/object or form/function are just 'particular cases of expression' with respect to a 'third term' - the bodies - which express their affects and in which their affects are expressed (Deleuze 1992: 333-5, 27). Evans' definition of *projection* as a distinction made not only **in** the imagination *or in* the perception but **between** actual things and what caused them articulates this important principle in an architectural context, contributing to the production of a non-representational account of design knowledge and practices.

Evans argues that the projective relations that drive a particular process and develop particular products in relation to the creative effort of the architect have been repressed by representational epistemological accounts. He claims that representational - picture - theory employs a translation analogy to make implicit these constitutive differences between intellect and world so that what is simply said or drawn can be understood as then simply heard or made. He describes this presumption that sound and word or line and wall are conceptually identical the presumption of a 'universal surface across which meaning glides'. Ultimately this approach produces a convenient removal of the body and being from expressions in language or drawing, which isolates the expression from its affect on an (external) audience in favour of more simple assignments of categories.

Instead of simplistic 'translations', Evans demonstrates that there are transitive relationships of projection in every relationship constructed between imagination and perception and the world outside them. He convincingly argues that an intellectual, representational, explanation of creative relationships as a process of translation cannot therefore be adequate, and instead proposes a privileging of the relations of non-identity

between imagination and perception and the external world. Evans argues that rather than naively accepting the (albeit enabling) correlation between either imagination or perception and the world; instead of - complicitly - believing in an identity between object and idea or phenomenon and perception, we must seek out and prioritise the embodied relations of difference which occur between the body and their subjective and objective existences - for it is these relations that are the absolutely specific and concrete sites of creativity. It is in his restriction that a projective relation is defined in terms of such actual instances of corporeal affect or change, that enables them to be considered as real, affective distinctions (rather than merely nominative).

Evans' approach to the analysis of architectural creativity is explored in relation to the Rotterdam Kunsthall design process in order to make more explicit the relations of projection that occur in the 'translation from drawing to building' in both the relation between architect and drawing and between drawing technique and formal possibility. It demonstrates that architectural knowledge cannot be reduced to a representation (either of perception as a copyright or of imagination as a patent) but is instead produced in design processes when real distinctions of affect are created. In a critique of Eisenman's account of creative or 'Critical' design processes it is shown in chapter four that it is not enough for a real distinction to be made in relation to either form or function to create a non-representational account of - disciplinary - architectural affects. Instead a real distinction must be understood as a differential which precedes all *forms* - whether forms of content understood as internal functions or forms of expression understood as visual products.

Heading	P1_The architectural project	P2_Embodying projection	P3_Doubly articulate	P4_Forming relations	P5_Repeating difference
Principle Name	1 _ Real	2_Embodied	3_Two-form	4_Composed	5_Serial
<i>Principle description</i>  <i>area covered (below) / Sub headings (right)</i>	Indicates that the architectural body is understood to be produced by real (projective) relations external to itself	Indicates that bodies produce and are constituted by (projective) relations: It is the enduring character and the dynamic properties of these relations with the outside that makes the individual body distinctive	Indicates that multitudinous (projective) relations articulate two embodied forms; those that are selected to form an interior and those which are projected to produce an exterior	Indicates that bodies are continual variations of compositions of the projection and selection of two-forms	Indicates that bodies are composed in series through the uni-directional but reciprocally determining, process of continual distinction and composition (through a repetition of differences)
<i>Drawing together conclusions from previous chapters</i>	Expressionism in the architectural project	Architectural bodies	Beautiful processes and Critical products	External relations	The emergent capacities of creative relations
<i>The use of these principles in the MSA projects atelier</i>	The expressionist architect	Specifying relations	Explicit making	Already expressed	Open beyond
<i>The development of design-research in inclusive urban design</i>	Intuiting the project: Inclusive urban design	Knowing more	Negotiated shares	Social city	Being, explicit

**Figure 53\_**  
**Five principles for a shared city**  
 Summary matrix of chapter structure



The Bat House Project demonstrates that real distinctions drive the expressions of a design project through the interlocking affect on the embodiment of the designer (and the design team) of relations external to them. These 'external' relations are considered to include their own expressive products because these are no longer understood as the simple translation of an inherent idea, but constituents in the process of production of those ideas. The Bat House Project creates a series of real distinctions which begin with the insistence of Jeremy Deller on including ecologists as equal partners in the competition jury due to his personal love of bats. This change in the traditional diagram of power of an architectural competition then enables the problematic question 'What is good for bats?' to remain open. The answer to this problem becomes something which must be negotiated with the bats (via the ecologists) rather than answered by a generic solution that represents 'bats'. The chapter serves to demonstrate that involvement of a user in a design process is only ethical insofar as it is productive of adequate knowledges (of real distinctions). It both challenges the architects' explicit desire to reduce the problem to a typology and enables it to remain requiring of an embodied – projective – response as part of a collaborative *project*.

The Bat House Project shows that whilst every process of design and its individual products can potentially serve to either challenge or reiterate a dominant diagram of judgement (within which those design processes can traditionally be articulated and visualised) for such a diagram of power to be resisted or redrawn it requires the architect to be actively engaged with a *project* which extends outside of those boundaries. A *project* is by definition embodied through thoughts, feelings and formal expressions made in open relation to other - external - bodies and conditions. Such a pursuit makes the current drawing, design or built form but one product in a series that both began before and extends beyond the immediate focus. The critical

potential of architecture and the architect lies in the construction of diagrammatic relations that include their processes and products as part of such an intuitive - *projective* - strategy. It is in this sense that all creative processes develop through the speculative construction of relations outside of themselves, insofar as they are able to be affected by those relations without being destroyed. In a *projective* architectural epistemology, creativity can be seen as an emergent property of a body entering into and enduring processes of engagement and affection.

### The expressionist architect

A pedagogic environment which responds to the principle of prioritising real distinctions of projection must therefore have its own *project* which it is able to make explicit as well as methods for enabling its students to overcome the representational in thought and behaviour (in both the social and formal expressions of the practice of architecture). The MSA Projects atelier nominally articulates its position through a selection presentation at the beginning of the year, through the focus of the studio briefs and a series of supporting seminar discussions. However the 'project' of the atelier is more properly articulated through the work it undertakes outside of the school. This *project* is characterised by what has become an enduring theme of 'Sharing the city'. This theme encompasses a range of activities that have explored participatory design-research methodologies in urban design practices with the aim to make the city more 'inclusive'. The ambitions and methods by which this project may be achieved are made an explicit part of the discourse and praxis of the pedagogic environment.

The expression of principle one means that the individual architectural student must propose and promote their own *project* on the basis of their desires or drives; drives which, by definition, are produced in relation to external engagements. A project has to emerge for each individual in

relation to their own desires and experience for it to have an immanent relation (productive of real distinctions) with their productions and processes. It is in this way that the project of the atelier (comprising a range of staff and students) has also emerged as positive and creative responses to dissatisfaction with the current ability of the architectural discipline to impact on social inequality. The MSA projects atelier has investigated a range of techniques designed to help the students develop their own project intentions through encounters outside both their personal and professional habit.

The brief for academic year 2012/13 was divided into three parts, in order to place equal importance on, and make explicit, all three aspects of the triad of expression. In the third part of the brief 'ethical project', the students were asked to consider their practices in terms of a 'project' that is expressed through their products and which in turn, are projectively related to the processes by which they create them. One way in which this ambition has been manifested is what has been termed 'an inspiration matrix'. This gathers together a variety of textural and multi-media influences which can be related to a discourse of 'projects'. For example references have included Spatial Agency (2011) alongside films such as La Jetee (1962) and the work of architectural practices such as MUF or FAT; as well as texts on Critical architecture such as 'Notes on the Doppler affect and other moods of modernism' (Somol and Whiting 2002). The atelier supports a discourse around the construction of the inspiration matrix which is intended to enable both a collaborative understanding of the issues raised by the atelier position and the construction of a personal association with that agenda through engagement with source materials intended to be attractive to a wide range of student perspectives. The students are expected to produce a creative response to the sources and to generate a similar matrix for the development of their own project populated by their own inspirational

selections. This begins a process of making explicit the diagram of their own architectural practices, both to the staff and to themselves. The project in this context has been described to the students thus: 'The project is the *problem*, it's what does not go away and what gets you out of bed in the morning.'

For example, Andrew Lightfoot's project began by researching a range of architectural practices that sought to address issues of inequality. At an initial staff-led participatory workshop he met city stakeholders and residents and was personally moved by discussions concerning employment. Subsequently he researched the mechanisms of welfare in relation to unemployment through both desktop studies and through engaging with users and managers of welfare systems. His inspiration matrix can be seen to bring together music, film text, places, and people. His initial architectural products had an immanent relationship with their formal output, for example he represented his research into welfare systems and his alternative proposition by designing and producing a 'Job Centre Plus' version of the Super Mario Brothers (1985) video game.

The attempt to instigate a discourse around the project or diagram which drives the products and process of a student's praxis has been promoted alongside the opportunity for the development of affective encounters external to the discipline through formal (staff organised) workshops which then lead onto more individual, student-directed engagement exercises. These workshops have been offered in every year of the studio so far and are a key technique for the generation of individual project agendas. They have also often been strategically related to live external research projects as the first part of a programme. For example, last year's first engagement workshop also acted as a research exercise for the Old Moat in an Age-Friendly Manchester (2013) research project. This year's workshop

(2013/14) was aligned with research undertaken for the development of 'Cheetham Hill Urban Living Lab' (2013).

Formal external engagement events such as this latest one have consistently led to student-instigated projects that have also been integrated with the particular requirements of the Architecture school assessment process. For example, in 2012, Kathryn Timmins undertook a project focussed on the ability of people to give each other advice on the basis of the differences between them. This resulted in the design of a women's advice centre as its main product but in the process of which, she created a choir with women from a local support group in which she had become involved during her earliest research and engagements. In this respect, her project continues to exist outside of the architecture school but also had, as one of its many products, an exemplary description of a built architectural expression which was designed to meet the requirements of the Professional Regulatory Bodies' criteria for attainment (PRB). The choir performed at our end of year show, singing a range of popular songs including 'Money, Money, Money' by Abba (1974), conducted by Kathryn.



Figure 54\_  
MSAp Students in a 2012/13 sharing the city workshop



Figure 55\_  
MSAp Students in a 2012 Human futures: Urban futures workshop

## Finding Your Way To An Architectural Project

The architectural inspirational matrix (aim) contains all the necessary sources to gain an understanding of poverty within the UK as well as including media that aims to stimulate future projects. Each line covers differing sources, from music to architects as well as looking at organisations that reuse and recycle within the community. Each line has a principle station, which encompasses a key source.



**Figure 56\_**  
**Inspiration Matrix**  
 Andrew Lightfoot (MSAp09/11), From Not Content: Projects for a shared city (2012)





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Figure 57\_  
Super Mario Bros. 3 Job Centre plus edition  
Andrew Lightfoot (MSAp 09/11) Not Content: Projects for a shared city (2012)





**Figure 58\_**  
**Pankettes choir**  
Kathryn Timmins (MSA 2011/12)



**Figure 59\_**  
**External perspective of Wythenshawe Women's Advice Centre**  
Kathryn Timmins (MSA 2011/12)



**Figure 60\_**  
Sectional perspectives Wythenshawe Women's Advice Centre  
Kathryn Timmins (MSA 2011/12)

## Intuiting the project: Inclusive urban design

In the academic year 2007/8 MSA projects collaborated with Manchester City Council (MCC) Valuing Older People team (VOP). VOP were part of the MCC Joint Health Unit (JHU) at the council and were one of a series of proactive and cross-disciplinary programmes designed to address health inequalities across the city, in this case with a brief to improve the wellbeing of the city's Older population. We agreed with VOP three positive aims or affects which would justify the council's involvement, and our year's brief was entitled 'Towards an Ageless city'.<sup>113</sup> First, to increase exposure of 'the age debate' within the construction sector, we held an exhibition of the students' projects in the Centre for the Urban Built Environment (CUBE in Manchester). Second, to engage lay/resident advisors in the architectural process we extended invitations to older residents in Manchester to participate in workshops and our 'crit'<sup>114</sup> system. Third, to increase/create direct 'intergenerational'<sup>115</sup> engagements we organised a series of workshops and presentations both within the school and at more public forums such as 'The Big Event' (Manchester's celebration of the International day of the older person). The year's work was summarised in a self-published book called 'Large Print, Little ideas' which was widely disseminated to Manchester residents, third sector interest groups and City Council Officers.<sup>116</sup> It was further used as a communication tool by the City Council when meeting external agencies and Government departments which led to us subsequently winning funding from the Cabinet Office.

The MSAP collaboration with MCC focussed the unit towards the production of affective engagements between architectural bodies and multiple individuals operating within diagrams of power not normally affecting or affected by architectural design knowledge. In 2008/9 we were invited to join an MCC bid for funding from a Cabinet Office project entitled

'Generations Together' and the MSAP contribution 'Sharing the City' (there were twelve other projects in the consortium), and we were awarded eighteen thousand pounds for the purpose of intergenerational workshops, exhibitions, publications, a website and for developing collaborations. The cabinet office funded Generations Together demonstrator programme ran from Oct 2009 to Mar 2011. The aim was to enable 12 local authorities to develop and evaluate intergenerational programmes that would become part of their mainstream provision (GT 2009).

The 'Sharing the city: Generations Together' project<sup>117</sup> was a unique interdisciplinary and extra-disciplinary collaboration between the staff and students of Manchester School of Architecture Projects group, Manchester City Council's 'Valuing Older People' team including leading academic partners in social gerontology (Professor Christopher Phillipson at the University of Manchester and others), community activists, third sector organisations and Manchester Residents. Over 1000 members of the public were directly involved in the project and a large number of those worked collaboratively with Manchester School of Architecture Students on projects of benefit to local communities. Public exhibitions and engagement events were held at prominent locations including the Sharing the city pop-up shop at the Trafford Centre, Greater Manchester; Noise Lab gallery, Market Street, Manchester and the Centre for Urban design and the Built Environment (CUBE) gallery, Manchester. Exhibition catalogues have been produced for each and a review of five years of the work published in book form. The project also developed an electronic archive of interactions between students and local community members which recorded a wide range of impacts including collaborative projects resulting in local environmental improvements and campaigns.

The Generations Together project as a whole was designed to influence the direction and content of MCC policy related to ageing and the built environment and discover activities which should be followed up and mainstreamed. Our work has been a significant driver for Council strategy<sup>118</sup> and now includes 'Shared Spaces' as a key theme. The Sharing the City research has provided both practical examples of how communities can be involved in urban design issues and activities as well as demonstrating the importance of these issues and potential of these methodologies in relation to a holistic wellbeing agenda such as promoted by the WHO Age-Friendly Cities initiative (WHO 2007). For example, active participation of the project team and students in the instigation of legacy events subsequent the end of the Generations Together project assisted in the authorship of a programme of work which led to the independent development of the pilot project in Old Moat with Southway Housing Trust (which was then won through competitive interview by the research team).

In addition the Sharing the City design-research has contributed to winning funds from the ESRC,<sup>119</sup> MIRIAD<sup>120</sup> and MICRA/Cities.<sup>121</sup> These funds have been used to develop an interdisciplinary research group (Population ageing, Urbanisation and Urban design Research group) and an international research network (International Age-Friendly Cities Research Network). These groups are key in the ongoing development of age-friendly research in Manchester bringing together and influencing research around Europe (and the world) as well as undertaking new projects such as Cheetham Hill in North Manchester (which commenced in September 2013). The 'projective' practices of the atelier as expressed by the individual students and staff have generated a collaborative project for the atelier as a whole which is expressed as a project for inclusive urban design-research.

## P2 Embodying projection

Indicates that Bodies produce and are constituted by (projective) relations: It is the enduring character and the dynamic properties of these relations with the outside that makes the individual body distinctive.

### Principle 2 \_ Embodied

#### Architectural bodies

The principle that real distinctions cannot also be nominal distinctions requires that the body in which those distinctions are being made is held to be simultaneously productive of the ideas we form about those distinctions. This embodied nature of real distinctions requires that the *variations in the continuous melody of affect* between bodies in composition be understood as the substance of relations of change which produce the subjects and objects between which they distinguish. Without the inclusion of the sense making body in our conception of knowing no real distinctions can be made. Without a concrete correlation between the idea and a change in material actuality we merely distinguish between the nominal, quantitative or representational. Consequently Evans' way of looking at the architectural drawing can be seen to question every aspect of the traditional understanding of architectural form production through pursuing the concept of projection and the 'project' it implies. Evans argues that 'projective' relations should be made an explicit part of architectural discourse in the hope that this would enable creative processes to extend beyond the limits and resist the excesses that representational accounts currently place on them. The notion of making these relations explicit requires that the account be placed in a specific context of embodiment and

the relations which are being discussed situated in terms of the subjects and objects between which they are defined and of which they are creative. In this way, distinctions are made not only of the imagination or the perception but of the relations between the actual thing and what caused it. The relations of projection between the architect and the drawing or the drawing and the contractor or building or the building and the user are then understood as 'embodied'. Making explicit the projective relations that enable creative processes begins by acknowledging this embodied nature.

Traditionally and prevalently, (at least as exemplified by the practice of Intellectual Property law) the labour of creativity is repressed through representational reduction to a single Author - as an Authorial claim formed around representations rather than affects. Chapter three demonstrates that the actual projective creativity in the Rotterdam Kunsthall design process is produced by the design team in an embodied, serial process of production of models and drawings that is neither contained in the copied drawings nor expressed as copying. Using the Kunsthall as a case-study it is shown that while the production of an authorial subject is always assumed to lie in a particular moment or object inherent to the subjective selection (a form, a pattern, a patent), it is in fact an embodied relation which occurs as a composition of affects between numerous sources, sources which are all external to the subjective individual within the process. This argument of embodiment doubly problematises the architectural author and the ownership of architectural knowledge. While it does not dispute that there are creative activities which are specific or singular (to architecture) it does insist on the contextual reality of *and* abstract composition of these creative productions rather than reducing them to some general representation (whether that be a more complex kind of drawing such as a 'diagram' (or patent)).

Chapter four shows that Eisenman's linguistic formalism argues for embodiment only subsequent to a disciplinary distinction and consequently defines architectural knowledge as a 'forced perception' of form *within* the discipline. The chapter demonstrates that by so doing he substantially removes the potentiality of both user and context from his discussion of the literariness of the language of architectural formal production. Chapter four outlines a Deleuzian theory of architectural language in terms of a pragmatic - expressionist - process of sense-making as a potential alternative to Eisenman's limited understanding of immanence. This Deleuzian approach requires both forms of content and forms of expression to be simultaneously understood from an immanent perspective rather than made subsequently distinct.

Chapter five demonstrates how acting in the knowledge that bats too have agency, changes the diagram of power (of architectural aesthetics) because the understanding of user is no-longer produced by comparison to a representation of them but made in terms of embodied relations between the designers and the bats; between the bats and the site; and any proposed intervention. The project of the bat house competition changes the diagram of power through being led by an artistic philosophy; through including ecologists in the judging panel and by the inclusion of school children and student designers alongside professional teams in the competition. The project of the Bat house produces an affective relationship between the ecologist and the bats and subsequently between the bats and the design team by constructing an embodied negotiation between 'What is good for bats' and the judgement of 'What is good for architecture'. This is possible in this situation because there is no opportunity for the production of a dominant intellectual representation or typology to which the common-sense can refer: Bats are irascible and explicitly including them in the design process upsets the complicity of representation.



Being affected makes explicit the habitual self of the architect through revealing a differential repetition of the properties of their character and the extent of their capabilities - enabling a moment when something may be done than otherwise would. Deleuze maintains that this always, and can only, occur in relation to a body outside of the enduring self because that is the site of the habituation of the character of that body. This process of affecting can take place in response to another architectural body (like Gareth Pearce's Kunsthall drawings for example) or bodies outside of the discipline (like the bats in the Bat House Project). This concept of embodiment involves the body in drawing its own boundary through specifying its expression in time and space rather than using a representation of a body or discipline to define a boundary for the self within a larger representation. This judgement of embodiment is therefore measured through the specification of an active affect - what can a body do (here, now)? Without such a specification of embodiment it is literally not possible to account for how we make sense of power relations because whilst diagrams of power are real they are not themselves formal objects. To be productive of a real distinction affect has to be found in the formation of an *active* form of knowledge (intuition) - through acting towards the production of further affects (in other bodies).

### Specifying relations

In the inclusive urban design practices developed by the MSAp atelier this second principle is most prominently expressed through an exploration of the generation of design-research knowledge through engagement with external bodies. This sense of embodiment does not automatically or necessarily mean these relations have to be made outside of *architecture* or require that all design knowledge must be made in relation to other people *outside of the discipline* - as this would be the production of the 'outside' as just a new reified category. However, responding to the embodiment of

relations does mean that at least two bodies must be involved in that affective, production.

Through the collaboration with MCC and using other contact networks, a group of people of diverse ages, occupations and attitudes from councillors to local residents (and including third sector groups, artists and researchers) are attracted to attend formal workshops organized to facilitate conversations about wishes and desires for the use and 'sharing' of the city, attempting to avoid discussions which lead to a list of complaints or lacks but working on what people enjoy and desire more of (Figure 54). The workshops enable a first-hand appreciation of the desires of particular residents of the City. The themes, locations and instigations of the workshops change from year to year depending on the connections that arise but focus around deprived communities or neighbourhoods in relation to 'inclusive' urban design. The workshops are designed with the students building on previous experiments and events held in previous years and are intended to identify connections to communities of place and/or communities of interest and act as a rehearsal for the students' later self-organised workshops/engagements. The students are subsequently encouraged to develop and lead their own engagements which are expected to evolve through making direct contact with people affecting and affected by the issues and situations in which they are interested. They are asked to record their engagements with respect to the potential they offer or the affect they have on their *project* development. These are variously described - for example as 'Charts of affect' or 'engagement diaries'. In 2009/10 an initial formal workshop engagement with 40 external participants with the 25 MSAP students led to over 400 encounters between the students and different external participants. In 2012/13 the students recorded that between us all we discussed architecture and urban design with over 1200 people with many becoming closely involved with the developing projects.

## Knowing more

The principle of embodiment is expressed in the urban design-research methodology of the atelier in terms of an emphasis on 'participation'. The notion of the specificity of embodiment logically implies that research techniques which fail to address the actual conditions of a situation will not be able to discover the operation of the diagrams of power which formulate the particular social and technical construction of that urban environment - because this principle holds that the relationships between the bodies inhabiting that environment are constitutive of those conditions. Consequently the attitude of the inclusive urban design-research we have undertaken has been to engage local people who categorically know *more* in an embodied sense about the experience of life in those environments than people who do not live there. Exploring the nature of the embodied knowledge of that particular community can reveal the affective relations that make a city liveable or loved (or not loved). However, because the causal, affective relations of a diagram of power are in fact formless, they are not revealed as representations to external observers, but rather are made explicit through the construction of new relations outside of their habitual character or abilities. Seeking to actively affect this is the second part of the double articulation of the forms of knowledge of a particular 'community'.

In practice therefore revealing the specificity of the embodied knowledge of a particular community in a particular environmental setting involves the personal and active - propositional - involvement of the urban design-researcher. In our experience we have discovered that such an enterprise is also variously and multiply collaborative both before and after attempting to engage in such a fashion with a particular assemblage of people and place. For example, the activities of our main collaborative partner (MCC/VOP) have evolved and grown over the course of our engagement with them resulting in Manchester gaining official status in November 2012, as a World

Health Organisation 'Age-Friendly City'. Over the previous three years multi-stakeholder conferences, meetings and workshops had been used to develop the strategies, policies and practices of the City Council with respect to the relative health or well-being of its older population under the WHO concept of 'age-friendliness'. This work was undertaken in recognition of a disproportionately high level of multiple-deprivation<sup>122</sup> experienced by the (poor) older population of Manchester (and the UK) and was part of a participatory approach of the MCC Valuing Older People team. This approach continues to work through the convening of a VOP board with older volunteer members which reports direct to the City Council on these issues alongside the ongoing development of a system of local VOP forums from which the board membership can be drawn and through which specific local projects can be created.

The MSA projects atelier and I participated in these activities in a number of ways. Initially I presented the students' projects as examples of our approach<sup>123</sup> at council events. Increasingly however, we developed a collective discourse which described the purpose of the atelier and the individual students' projects in terms of a 'shared city'. The atelier had become a project for the development of inclusive urban design practices, the products and processes of which were multiple and varied (and to a large extent preceded our knowledge of the nature of the overarching urban dimension of the project). We went on to organise workshop events around these themes and present talks discussing the concepts and applications of principles of inclusion in urban design and architecture. All of the conference events to which we contributed were used to create further engagements between the participants and the students. Through this process of multi-stakeholder workshops (of councillors, council officers, researchers, architects and urban designers, disability rights advocates and older residents of Manchester) we set out five key principles on which we settled

to describe the parameters of inclusive urban design. These events and discussions were also used to articulate the potential for further research activity outside of the auspices of the atelier and to produce collaborations outside of the school of architecture. As part of this we were invited in 2010 to talk with the Belgian Ageing Studies at the Free University of Brussels where, for the first time, we publically presented our work on inclusive urban design as a methodology which held affective encounters as a core principle (see slide from that presentation outlining the five principles in Figure 61 below). These five principles strongly correlate to the five principles outlined in this document, especially in terms of how they are expressed in the professional research practices. For example the outcomes from Manchester City Council's Age Inclusive urban design pre-conference panel 29th September 2010 in Figure 62 were both influenced by our approach to inclusive urban design and led to the construction of the method in the slide immediately below.

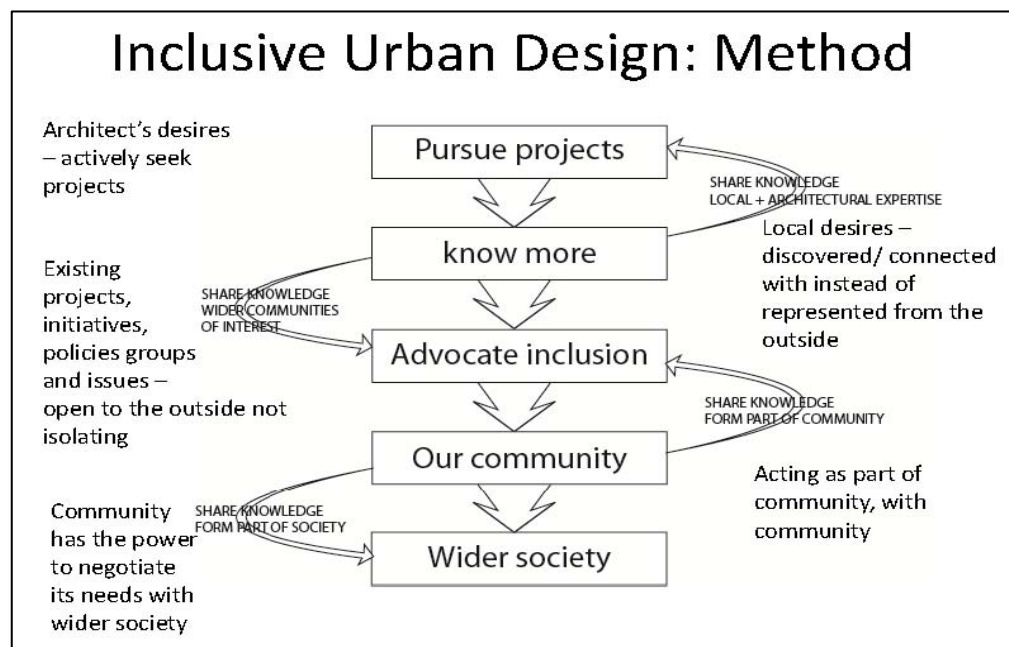


Figure 61\_  
Slide from MSAP Inclusive Urban Design presentation  
Free University of Brussels December 2010

<b>5 actions/questions from September 29<sup>th</sup></b>	
<b>Pursue projects</b>	<ul style="list-style-type: none"> <li>• Identify places/spaces in Manchester where Age Inclusive design projects could be carried out. This includes options such as Life-time neighbourhoods work, Enquiry by Design and Planning for Real pilots</li> <li>• Links to existing projects and areas, the needs of specific groups, provide assistance to existing campaigns</li> </ul>
<b>Know more</b>	<ul style="list-style-type: none"> <li>• Develop a funding bid to support a programme of Age Inclusive design projects</li> <li>• What are the key research questions, what do we need to know and how can our research support or combine with our other issues, what knowledge do we need to gain?</li> </ul>
<b>Advocate inclusion</b>	<ul style="list-style-type: none"> <li>• Develop a learning network across Manchester/UK to develop understanding and learning from this work with an aim to develop this into an Inter-Agency Group to fight for Age-Inclusive Design</li> <li>• How can we build the community of interest locally, nationally and internationally? How can we share knowledge, and what do we need to share/</li> </ul>
<b>Our community</b>	<ul style="list-style-type: none"> <li>• Build on the Manchester Generations Together legacy to develop more Intergenerational activities with more Intergenerational use of spaces/places and inter-generational ownership of spaces/places</li> <li>• How can we act to support our existing communities and ensure that we involve people of all ages, attitudes and occupations?</li> </ul>
<b>Wider society</b>	<ul style="list-style-type: none"> <li>• Develop community engagement processes to replace short-term consultations with long-term conversations within an Age Friendly context. This includes planning, regeneration, redesign of spaces and wider community engagement</li> <li>• How can we actively and positively engage with our planning departments officers and policies to help ensure our cities are shared? Do we need to engage other issues such as the big society?</li> </ul>

**Figure 62\_**  
**Actions developed from participant workshops**  
 Manchester City Council's Age Inclusive urban design pre-conference panel 29th September 2010, Manchester Trade Union Hall

## P3 Doubly articulate

Indicates that multitudinous (projective) relations articulate two embodied forms; those that are selected to form an interior and those which are projected to produce an exterior.

### Principle 3\_ Two-form

#### Beautiful processes and Critical products

Chapter one shows how a body always has two directions or articulations of affect which are the actual material expression of an informal diagram of power as a specific set of properties *and* capabilities which constitute *both* the being *and* knowledge of that body through the relationships which those capabilities exercise and of which those properties are characteristic. In Chapter one I explain how these Spinozist terms may also be understood in Deleuze's later, more linguistic terminology of forms of content and expression in order to enable a correlation to discussions of these terms in the work of Koolhaas and Eisenman. For Deleuze a body has two dimensions or articulations, its *form of content (of expression)* - how it 'selects' itself through the affect of the world on it and its *form of expression* - how it 'projects' itself through its affect on the world.

For Robin Evans the act of 'projection' involves both the perception and imagination of the architect, never either one or the other. The recognition of a two-way process of relatively independent, reciprocal determination between forms of expression and content and between those categories and the site of their expression (the embodied relation with respect to an audience) moves Evans into a shared territory with Deleuze, articulating a triadic approach to architectural knowledge which is understood to have two

simultaneous forms. However, the constitutive nature of the projective act to what is imaginable or perceivable means that this understanding is one which has to be held to occur *across time* as well as *at the same time*. For Evans each architectonic projective form has a set of techniques which can be articulated and a set of visualisations which are expressed in the process of drawing - and while both occur at the same time - these processes and products are themselves part of a longer interactive trajectory where one expands or limits the other to the point where a desire or requirement for a new form or new technique emerges. Evans argues that this occurs through a system which has already provided intuitive signals as to what might be further done through or by those techniques or what would be interesting or valuable to require them to provide. Such a system is produced through the interaction with a new context or set of external bodies which force it to do 'otherwise' than its habit. For Evans it is the positive differences between the state of the imagination or perception and what it thinks or sees in the current expression (drawing) of the series which produces the (critical) creative - projective - moment.

The example of the Rotterdam Kunsthall supports the proposition that architectural knowledge cannot be reduced to the expression of a drawn diagram and that it in fact exists in the relationship between the technique of production of a drawing (for example, as a process of cut/paste/scale/reconfigure/rename of a previous design for the same or similar site or type) and the creative potential of the design produced for the architect and for the user through that technique. The creative knowledge in the Kunsthall design process is produced when the design team force themselves to break the habits of functionalism using a set of external constraints in a kind of technocratic, professional montage process. Chapters three and four together suggest that Eisenman and Koolhaas both share an understanding of the role of both forms and contents of forms as well as the



interactive nature of the production of differentials between them - using a surrealist (in Koolhaas's case) or psychological (in Eisenman's) heritage (Eisenman and Koolhaas 2009).

In Eisenman's account of the design process however, his sequential distinctions deliberately demote forms of content to the role of habit, assigning it the baseness of the everyday and placing it in simple opposition to artistic autonomy. Chapter four argues that it is this ultimate prioritisation of disciplinary identity which serves to re-essentialize his notion of immanent form, because without both forms of content and forms of expression there is no body in which architecture can make a real distinction, and his notion of immanence becomes merely a solipsistic continuum.

In chapter five, the dual form, embodied nature of architectural knowledge is demonstrated through the two-way affective exchange that ecologists in the project produce with bats. This example is used as a test-case in which to articulate the potential for understanding both formal productions and functional processes as simultaneous, expressive forms of creative production, which are differentiated through the affective context of their embodiment - that is as different species of affect rather than different (greater and lesser) categories of being. The presumption of the demonstration undertaken in the case of bats is that in comparison, any functional and aesthetic assumptions made for human inhabitation in a representational paradigm must be even more reductive and - obversely - hold even more potential for creative collaboration.

There is little doubt that Eisenman and others' insistence on a real distinction of affect of an architectural form on the architect within the architectural process has led to a wide range of inspirational and creative productions. The point now, however, is to simultaneously articulate this distinction

outside of the discipline to produce the same inspirational and creative difference in the client bodies and societies in which we practice. It is the position of this document that by following Eisenman in insisting on the construction of immanent relations in the creative process but without (as he does) internalising the distinction of architectural disciplinarity, a much more plausible relationship between architect and society can be produced. It is belief in the constitutive nature of these immanent relationships - to both the creative process and to the disciplinary subjectivity - that leads to the pedagogic approach of the MSAP atelier.

### Explicit making

In MSAP we instigate pedagogic process which direct the students to develop their work through live contacts - in an attempt to place emphasis on the real distinctions of a project and to avoid the reification of merely nominative distinctions. However, in this expressionist understanding embodiment is produced through the process of being personally open to be affected by the engagements into which a body enters *as well as* being willing to be actively affective in relation to others. Embodiment in the pedagogic environment is therefore doubly articulated - firstly as a requirement for the students to be specific through engagement with people and place and secondly through the expectation that this engagement be expressed through specific creative (architectural) experiences and products.

The principle of embodiment requires that any mental representation of a feeling must also be asked to correlate to a material condition before given any priority status, and that this restriction be invoked simultaneously in relation to the interior and exterior relations of a body (for example - whether that be through the visceral communication of the experience of a resident or the creative construction of a montage in the process of film-

making). This approach to embodiment is simultaneously promoted with respect to the architect – architectural product relationship and the architectural product - user relationship. Together the relatively independent and therefore explicit articulation and visualisation of a product places both forms in the context of a *project*.

Filmmaking is one technique we use to articulate the two-form nature of form-making processes and how they relate to the bodies through which *and* in which they are expressed in order to make explicit the requirement for forms of content and expression (giving neither a formalist or a functionalist priority). The process of making a film is described to the students in reference to a reading of Deleuze on Cinema as involving the composition of individual images or frames, which produce the affect on their audience through the difference between a particular frame and the previous and the next<sup>124</sup> which is explained by Deleuze in terms of two types of affect – movement-affect and time-affect (Deleuze 1986). Following Deleuze's analysis, we believe film-making can be used to make evident the fact that the form of expression of the film for the audience – in the viewing of the film – is just as real as the form of content by which this cinematic form of expression is expressed to the viewer. For example the affect of the 'film' as a Gestalt is produced through the composition of the qualities, subjects and juxtaposition of all the *individual* frames.

Here the individual elements of a composition are its form of content and are relatively, abstractly independent from the affect of the form in which the 'whole film' is expressed (e.g. the same film can be imagined produced using different forms of content). However, at the same time that content is specifically, qualitatively indivisible from the expressive affect on the audience (that film's specific affect is produced by the actual composition of these particular frames). The process of showing a film which one has

produced to an audience is an important pedagogic intervention because it involves recognition that the audience can no longer be assumed to be only the creator themselves or only the creators' discipline, and therefore that it might have a different affect on different audiences - making explicit the two-form nature of expression. By enabling this second affective direction the currently limited disciplinary boundary can be challenged. For example, Eisenman's notion of a formal compositional expertise is implicitly isolated from the composition of the politics of an enabling context. The expressionist project instead, attempts to make architectural products which 'force' the 'perception of form' for a range of different audiences which - crucially - include the architect themselves. This challenge offers the potential for the nature of architectural production (and its accounts) to become grounded in more problematic, open and - sophisticated - sets of relations.

Examples of this kind of work include that of Sarah Gilby who, in designing a new approach to dementia care settings, used a nostalgic montaging process to develop both her project and its formal products. Sarah used an intuitive compositional process based on testing aesthetic sensitivities, responding to scientific research and interpersonal relations in a complex mix. Sarah's project promoted an approach to dementia care settings which was prompted by personal discussions with dementia sufferers and their carers, but when presented to professional stakeholders caused controversy. Her proposals, arguably, would not have been produced if she had followed a functional analysis using current expert sources. In her proposals, residents diagnosed with dementia are allowed to construct and create their own territories in relation to the memories and experiences they can access, and care-workers are challenged to enable the residents to fit into these scenarios rather than force them to conform to situations with which they have disassociated. A live example of this radical - 'capability'<sup>125</sup> - approach

## Negotiated shares

The diagram of the atelier is realised as an expressive series of productive expressions and constituted by the emergent collaborative relations developed with external bodies. Reductive processes of translation are apt to reduce or remove these 'intermediate', embodied affects in order to present a 'clear and distinct' picture which is assumed to be a direct result of the intellectual category used to designate it – whereas the projects unit operates on the principle that these embodied affects instead constitute it. The various and multiple compositions the unit and the students produce with bodies outside of the school have a range of affects on the manner of expression of the unit as well as all the individual student projects. The expressionist approach problematises the categorical disciplinary production of forms of architectural expression. This approach asks that we consider an affective definition of the architectural products of an architect working towards architectural production through a series of non-disciplinary specific expressive relations rather than only with other architects, architectural critics or tutors; or only in terms of the internal relation between the architect and themselves via the drawing. Contrary to Eisenman's assertion this argument does not remove the architect's 'desiring-subject' relationship to the form of expression, it further insists that the form of content of that relation also be included in the account. This question is problematic for the opposite reason to the usual disciplinary anxiety regarding loss of expertise, because it requires the account of architectural knowledge be able to value its productions which are additional to traditional formal constructions.

For example in the inclusive urban design discourse related to 'ageing', a key issue revolves around definitions of 'disability' in relation to either a 'social model' or a 'medical model'. The WHO Age-friendly City guidance documents (WHO 2007) place emphasis on the need for a social model to fully understand the impacts on the health and well-being of older people,

but architectural responses (including legislative measures such as the Part M of the Building regulations' approved documents as well as planning guidance related to city accessibility) tend to concentrate on determined forms of the physical expression of environments in relation to criteria defined to a particular universal categorisation of users needs. It is an aside to this argument, but these often lead to conflicting requirements, which are unsatisfactory in both abstract terms (the whole world cannot be wheelchair accessible even if we wish it to be) and in specific circumstances (provisions for wheelchair users do not necessarily meet the needs of other disabled users) ( see Hanson 2007). When this is seen in more broad social terms the problem becomes more complex because for example there is little point having a local disability access bus service if none of the local people can afford the fare.

Whilst the WHO documents enable a discourse to be constructed in relation to the issues of ageing in holistic terms relative to a social model of disability, it has been our contention, developed through both research within the atelier and our professional, external projects such as the Old Moat in an Age-friendly Manchester research project, that the guidance retains (probably along with the majority of the lay population and much of the architectural profession) the view that design only operates with respect to the physical definition of objects. This can lead to discussions about the democratic participation in the design of a city by its citizens being understood as the specification of benches and paving rather than the ability to negotiate the projection of the conflicting desires of multiple audiences onto the processes of implementing these spatially located products. For example in parallel sessions at a recent conference, one session was describing the design of an 'inclusive' bench designed to especially accommodate the needs of older people, while at the same time I was showing photographs of situations around the city where benches had been

removed due to concerns about them facilitating the gathering of individuals who would engage in 'anti-social' behaviour - often in situations where older people had been consulted and supported their removal.<sup>127</sup>

Consequently, whilst recognising the tendency to reduce architectural formal production to physical expressions, I promote the role of the WHO Age-friendly city design guidance in respect to the manner that it emphasises the parallel importance of the development of social and physical infrastructure to produce (age-friendly) environments. Our inclusive - participatory - urban design-research approach takes the position that an architectural form of expression can include the design and involvement of the political and social process of negotiation and influence in relation to spatial / urban propositions. It must not be limited to the definition of the physical extents in which these activities occur. It is a key point that these are the precisely processes by which social and physical territories are currently actually occupied and constructed - but implicitly - and therefore what is argued for in certain respects, is no more than an open and explicit account of the sharing of the powers to negotiate these positions and locations. To do so however, we have to account for and practice in ways which are not complicit with the reduction of power relations to essences held within representations.

## P4 Forming relations

Indicates that bodies are continual variations of compositions of the projection and selection of two-forms.

## Principle 4\_Composed

## External relations

Deleuze argues that all thought, creativity and ultimately, all life, is produced through the continual, serial reciprocal determination of existence and potential, through the repetition of differential relations between bodies in composition. It is a focus on real distinctions of relation between bodies with 'Form' – the actual expressive existence of a body – seen as a continual process of folding between what is only a 'temporary' interior and 'projected' exterior. What *makes* these relations real is that they are instances of non-intellectual embodied 'sense' rather than merely intellectual, nominative representations. External encounters that are allowed to affect the thinking body are the force of thought of real distinctions - 'making sense' between bodies is a two-fold affective production that always acts as a production of knowledge *and* a constitution of matter. External encounters which force thought produce a real actual difference in the state of being and knowing of the body and the world rather than just a change in the 'thought image' of one body, otherwise unaffected. Here, difference is understood as a prior-relation that produces identity through the repeated or enduring compositions of bodies in differential relation - thereby producing identities as characteristic relations of difference over time – in series.

Evans observes that the power of the drawing is produced in the differential relationships *between* the architect and the production process, and *between* the drawing and the process of construction. The argument that extends from Evans' observation of the reality of the projective relationships between architectural subjects and objects, allied with this Deleuzian expressionist ontology, is that all creativity is produced through dynamic,



affective external (projective) relationships - but this cannot make sense unless understood as an enduring process (otherwise everything would simply be a 'random' experiment as is Eisenman's concern or everything seen as 'individual sections' - the worry Tafuri raises (1987: XX). The process of composing relations with external bodies in order to produce the most agreeable affects is therefore a description of the projective or expressive *process* (directed by a 'formless' project and creating formed products). The external projection of the temporarily composed or selected architectural body is an active and enduring relationship with its outside – going beyond 'observer', 'audience' or 'user'. The creative articulation of a form involves therefore an interactive and iterative process of composition which is open to the outside as experimentation or experience rather than a determination of the future from the past.

While the Kunsthall example demonstrated how such affective distinctions are made between bodies and their expressive products in an architectural process, it also makes clear that these relationships of affect are not deterministic or pre-determinable but instead speculative in relation to different *specific* audiences both internal and external. For example, the particular design process employed in the Kunsthall project utilises precedents as affective constraints outside of the architect-self which then serve to extend the capacity of the designer when they open themselves to be affected by them (beyond simple representational impacts). In addition, these speculative practices are shown to also have a potential affect on users by enabling the production of architectural affects which force the users to perceive forms of content and expression and become active agents in the building.

However, there can be no *inherent* relationship between the opening of affect on the designer and the creation of affects in a particular audience

such as '*users*' since, a critical expression for one audience or architectural body is necessarily affectively independent from relationships to other bodies (although some affects may be shared or result in similar subsequent expressions in different bodies). Therefore the notion of difference as an external creative impulse embodied in the relationship with the audience, rather than invalidating the user as a category of engagement (such as in critiques of participatory approaches where the fact that the users will themselves change is taken as proof that there is no point in engaging *any* user) extends the notion of 'user' to co-creator or co-author in relation to a *project* which makes power relations explicit (rather than a co-author of a product).

Whilst the process of composition of forms is paramount in Eisenman's epistemology, these compositions are restricted to a set within the architect and their discipline and formal expressions from wider culture. The creative impulse in Eisenman's work is explicitly understood as the opening of the architect to the outside of their habit, but the diagram of professional practice requires that he defend his authorial position through restricting the extent of his radicalism to the anteriority of the discipline and the interiority of the architect. By contrast, in an expressionist account, the architectural body can no-longer exist *within* the categories 'architect' or 'architectural drawing' nor the categories 'architectural discipline or architecture' because the creative impulse of the individual architect is at once constitutive of the discipline and determined by it.

Co-authoring a project specifically does not imply that all aspects of the processes and products of that project are 'universally' co-authored to the point where the role of an external collaborator is reified or internalised to become a new category of inherent aesthetic.<sup>128</sup> It is in fact, precisely because any doubly-articulate situation is open to the affect it actually has

that means making a *project* open to the current circumstances of power is appropriate and pragmatic rather than idealist, pointless or utopian. Real affective relations with external bodies are defined in terms of a two-way embodied change that means that external encounters are specific and productive contributions or they fail the test and fall back into 'civil',<sup>129</sup> representational, categorisations. The creative articulation of a form involves therefore an interactive and iterative process of composition which is open to the outside as experimentation or experience rather than a determination of the future from the past. This expressionist 'architecture' is always, already a multiple composition of bodies and the embodied perspective which can be taken with respect to the forms of content and the forms of expression of architectural production is not simply a choice between the individual creative act as autonomy (as is Eisenman's focus) nor creative knowledge as expertise (as is Koolhaas's focus) but an opening out towards a differentially constituting but (currently deliberately, complicitly) excluded audience.

Chapter five further demonstrates that the diagram or project, which by definition are as yet formless, define the inside and outside of the formed architectural body through its expressive productions and this in turn is what defines its particular autonomy or expertise: It shows that the construction of architectural affects is both an interdisciplinary and collaborative endeavour. The constitutive relationships of the creative process are demonstrated to be externally constructed through numerous interlocking relationships of power, rather than essentially authored by a creative genius. Architectural knowledges cannot be considered 'inherent' to the architectural body but constituted and produced through the articulation of the relations of power of that body over time and across time. Notions of individual or disciplinary autonomy or expertise in the creative moment

have, therefore, to be defined with respect to these embodied and specific external relationships.

The relationship between the design team and their disciplinary outside increases the potential of bats to live and extends the capability of the humans to live with bats. Ultimately the affective relationships of the project extend the capability of the designers (to produce liveable habitats for humans and bats). This active nature of capacity building is the real affect of the project diagram. The expertise or autonomy of the creative architect in any external encounter is defined by the affect they have on the bodies they are composed with and the change in composition that occurs in their own subjectivity. While the architectural project is what directs the architect and the discipline, the ethical value of the project is produced through its relative explicitness - since neither the architect nor the discipline are able to produce real distinctions autonomously from the affect of embodied *external* relations.

### Already expressed

For the MSaP atelier as a whole, our contributions to the series of conferences and meetings to which we have been invited and which we have held have led to enduring collaborative relationships. These relationships have, in turn, resulted in successful research funding bids (an ESRC international network fund and an Manchester Metropolitan University internal Collaborative research grant) as well as professional, funded research work. For example, our collaboration with Professor Chris Phillipson, Professor, Sociology & Social Gerontology and director of the Manchester Interdisciplinary Collaboration for Research on Ageing (MICRA) at the University of Manchester would not have been possible without previous collaborative practices with a variety of council departments, third sector agencies, researchers and older residents of Manchester creating the

shared ground for a live interdisciplinary collaboration (articulated as a need for as a simultaneous social and physical analysis of place). These collaborations culminated in a research project for Southway Housing Trust which examined the implementation of WHO Age-friendly City guidance in a specific neighbourhood between May 2011 until February 2012. This project has in turn led to the publishing of the report and a number of dissemination events which have contributed to our winning a project for a similar brief in Cheetham Hill but which extends this approach to a broader range of partners and in a more geographically and socially diverse area.

The work of the atelier has gradually produced a diagram of operation which enables the value and pursuit of a range of architectural practices which can exist in parallel with architectural practices which produce traditional formal consequences. While we are also constrained to produce traditional formal results for the appreciation of a traditionally constructed external examination process within the context of a professionally regulated degree, almost all of the MSAP students have, over the last six years of the programme, explicitly dealt with the relation between specific groups or individual life choices and the spaces that the city produces for them or with them. I give five brief examples.

Emily Crompton, dealt with the forces which were specifically preventing her from valuing these practices within the disciplinary diagram - by proposing a completely participatory school of architecture in which she explicitly denied the necessity of the architect producing traditional forms of expression, but rather redesigned the RIBA to include participatory practices in its plan of work.<sup>130</sup> Thomas Petch acted as a provider of architectural knowledge in a pro-bono capacity for campaigners and local communities, developing a positive alternative to the imposition of an incinerator in a site in Old Trafford, sharing detailed research findings on the negative affects of

incinerators with campaign groups and also designing a much greener, cheaper and safer alternative. Ruari Quinn had extensive engagement with a marginalised group in Manchester - older members of the LGBT community - and produced designs which articulated how habitual architectural approaches exclude a range of users - doing so by demonstrating that these needs can be discovered and directly addressed in spatial terms. Christopher Jaume produced a series of collaborations with a variety of garden groups and allotment holders, education establishments and Manchester City Council's Leisure department. These collaborations resulted in designing an information pack for MCC to send out to prospective allotment holders on how to make their allotments environmentally friendly; designing an allotment facility promoting cross-programming with local 'sure-start' centres for the Council and building a pavilion and garden for an intergenerational allotment group with the children and families of the adjacent primary school.

In the fifth example, Matthew Hargreaves received funding from MICRA<sup>131</sup> at the University of Manchester to undertake research in collaboration with Dr Andrew Wright with regards to how neighbourhoods support dementia carers. In addition Matthew undertook work on an 'age-friendly' Chorlton-cum-Hardy District centre, producing an alternative version of the City Council's current district centre plan, through extensive community engagement.<sup>132</sup> This document was circulated amongst council departments as an example of how community engagement could inform the planning of district centres to include issues of age-friendliness and has over a longer period, assisted with the generation of both the possibility and the capacity to undertake further professional research outside of the school.

These differential modes of conduct of the architectural body have acted to produce forms of expression and content which are non-representational.

These forms of expression and their contents are produced in the real composition of the relations of architectural production rather than architectural representation. These behaviours have impacted policy and behaviour and spirit and emotion - all in relation to the constitution of the city, city spaces and city formation. They have produced forms of immaterial labour which act to make the city more liveable or loved - but which do not endure as physical forms and are not subject to representational understanding or categorisation.

### Social city

In the professional inclusive urban design-research practices undertaken separate to, but under the auspices of, the MSAP atelier our team attempt to provide a propositional focus around a specific spatially located set of social and physical relations. In the Old Moat in an Age-friendly Manchester Research project we brought architectural and urban design skills and knowledge to the analysis and production of the social relations necessary to construct an urban design in the context of a economically, socially and physically excluded older population of a particular area of the city.

A key feature of our interdisciplinary working method was to attempt to be as spatially specific as possible. We employed some key social science methods of data gathering (e.g surveys and interviews of a range of different types) but rather than seek to produce general findings in relation to multiple specific individual data points we attempted to precisely - spatially and personally<sup>133</sup> - locate the information shared through the research process and then use these spatial connections to actively cross-reference between the multiple methodologies. Rather than attempt to be singularly 'objective' we sought to be interactive between a multiplicity of perspectives. From a research data perspective the production of the action plans (which were literally *plans* see Figure 67) required techniques of

mapping and spatialisation which to our knowledge have not been used before in the social sciences. Similarly the use of robustly gathered interpersonal data and the involvement of the participants in the discovery and analysis of such data, mapped using these techniques, appears to be highly unusual in urban design. While these gave the project internal coherence and external credence, both of these affects were produced through the manner in which the research was 'presented' so that the research information remained live and accessible to an audience of non-scientists and non-architects.

The form in which the research findings were expressed was as crucial to the affectiveness of the ongoing collaboration as the formation of the collaboration itself - the expression of the concept of embodiment was not restricted to the content of the various groups. At the same time, both the form of content of the voluntary committees and the form of expression of the reports can be seen to have been directed by a single project idea or diagram which holds the notion of the composition of external forms as a key principle of acting to increase our power.

For example, processes of participation here began with an invitation for local residents to contribute to the 'research' but evolved into an invitation to contribute to a 'project': at the beginning there were a group of experts called the 'Champions group' and a group of residents called 'Community auditors', by the end of the research phase of the project these were consolidated into a single forum preparing and prioritising action plans for the area, operating together (at least temporarily) as a single campaigning body. For example, a group of older residents have been working with the local regeneration team to lobby for certain design features enabling better access to a new development in part of a city - wide change to the provision of leisure services.



In a further example of how these relationships have changed the diagram of action in the urban design of the local area, subsequent to the completion of the project I have been involved as a consultant in the design of improvement works which represent some actions from the action plan which were prioritised at an implementation workshop. These design inputs have been conventional in the sense of the design work being restricted to the proposal of highways complaint signage and road markings, but a key difference has been that in the preparation of these designs residents have been consulted who are part of a wider project to improve the area. This has meant, for example, that the head of the regeneration team has been party to these discussions and the level of influence of the project partners and the lobbying power of the local residents group has enabled pre-submission discussions with highways capital projects department, a situation which would normally only be available to a large financially powerful organisation.

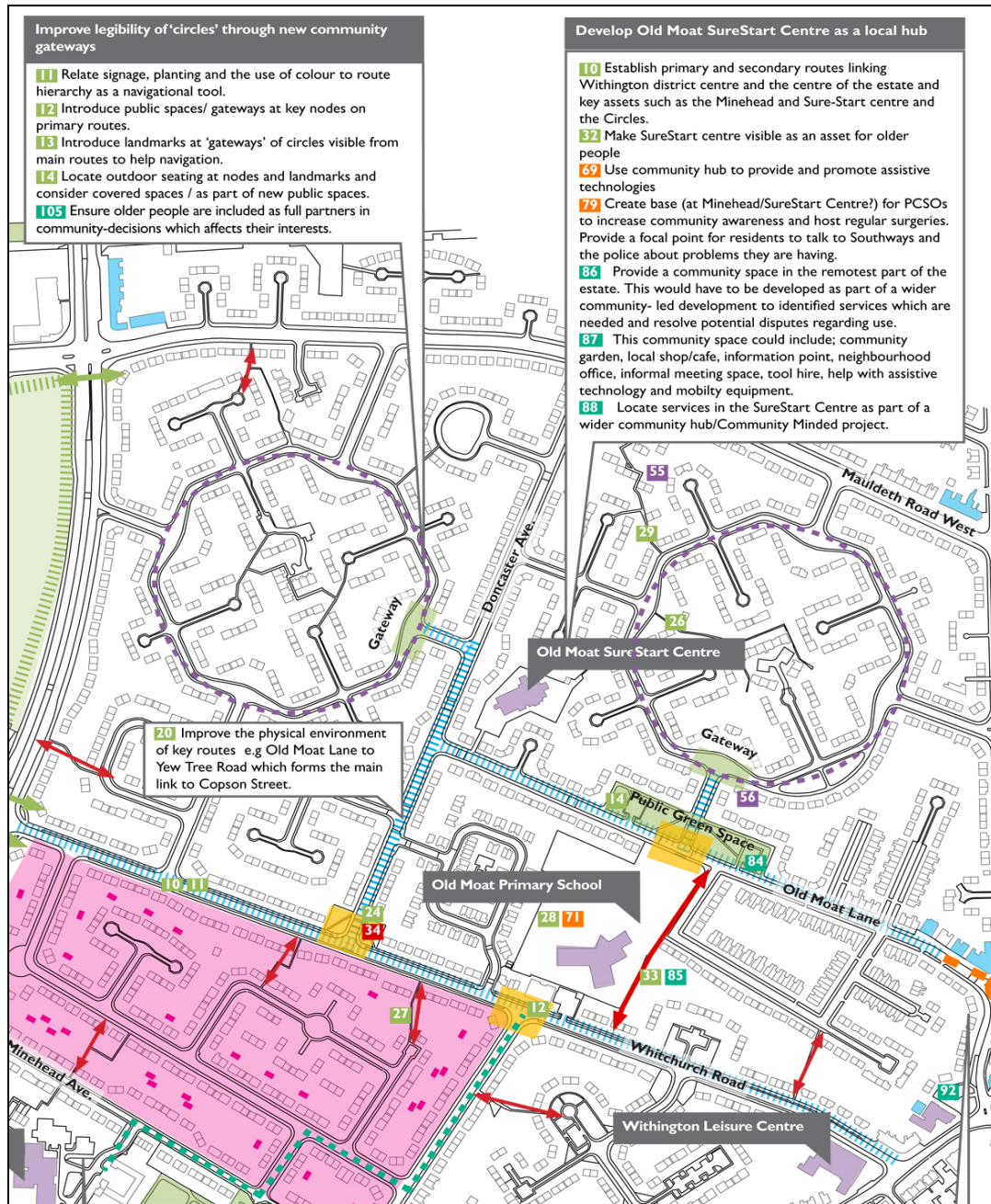


Figure 66\_  
Old Moat: Age-friendly Action plan detail

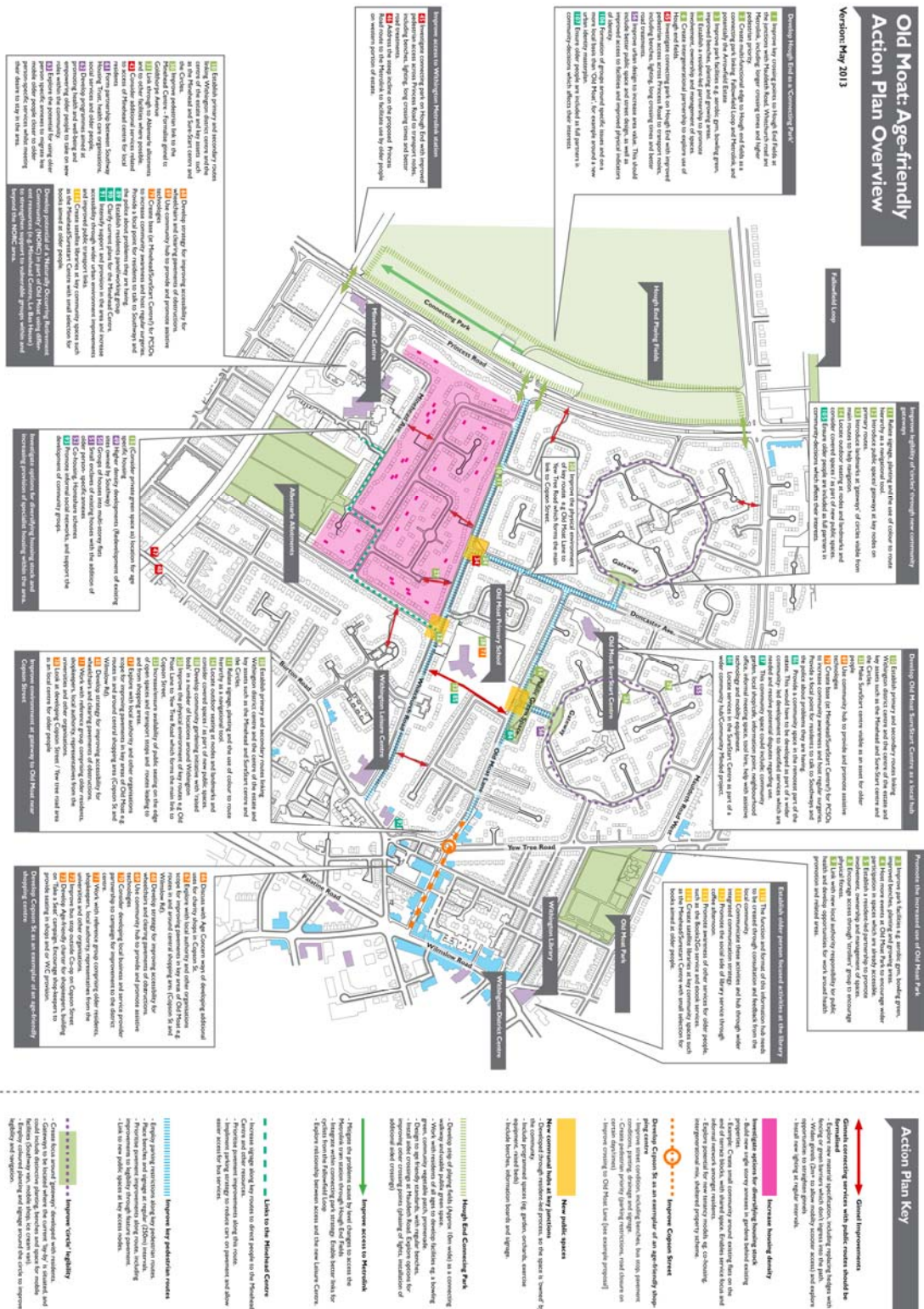


Figure 67\_  
Old Moat: Age-friendly Action plan

## P5 Making differences

Indicates that the Bodies are composed in series through a uni-directional but reciprocally determining, process of continual distinction and composition (through the repetition of differences).

### Principle 5 \_ Serial

#### The emergent capacities of creative relations

Demanding that the differential relationships through which a particular form of expression was produced are made explicit (and thereby demanding that every form of expression be understood to also have a form of content) is an epistemological mechanism which opens the account to include or consider both what is expressing itself in the present expression and how what is expressed by that expression may affect future expressive bodies. In this case, the knowledge which controls or determines a creative process and which then defines the creative autonomy or expertise of the individual architect or the discipline can only be properly understood in the projective terms of a serial processes of production rather than in terms of the representational categorical determination of a single authored product. The projective relations of the processes and products of the architectural expression are not static or isolated but part of a durational interdependency where the immediate expression is one of a series of reciprocal determinations. For Evans, the projective process of embodied creation only makes sense as a logical argument for the production and determination of particular forms in particular contexts as a serial process of composition over time – rather than a separation into ‘immobile sections’. Representation reduces the understanding of time to a repetition of the same; Expressionism is a continual repetition of differences.



Chapters three and five both show how the creativity of the design process emerges through its opening up to the outside in terms of allowing the introduction of conditions or constraints which are not the process of a rational determination of representations. Chapter five especially shows how the Bat House Project is a trajectory which informally composes a range of different products of the production process in series, over time. The processes and products of the 'project' are temporary selections and projective exteriors which have an indirect but essential relationship with the diagram of aesthetics of the competition. The Bat House Project attempts to institute a new diagram through its immediate concatenation of architects and ecologists. This is shown to subsequently direct how the relationship between bats and architecture are expressed in the responses of the competing audience of design teams - each addressing the competing judgements of the assessing panel. The critical, problematic, breaking of habit is shown in this project to occur in a complex series of interlocking and affecting relationships which serve to determine the outcomes of indeterminate processes without there being a dominant deterministic control. This is shown to be achieved through enabling the development of emergent properties and capabilities by remaining open to relationships with the user or audience of both the forms of content and the forms of expression of the design process - rather than constructing a single 'new', creative (and therefore assumed to be 'critical') representation autonomous from society or culture. The composition of forms with a user such as bats is shown to be a continual serial problematisation in which the current product is only a partial actualising of the projective expresser. For the design team to truly create a 'place' for the bats in the project, the Bats have to be an explicit part of the interdisciplinary negotiation. If architecture or urban design seeks to create - *places* (where active beings live) - then the projects they construct should be understood as an emergent capability of serial, expressive and external relations over time.

## Open beyond

The real - social - autonomy or expertise of the architect is expressed in the circumstances when they are able to act to make projective relations explicit because to do so directs or changes the dominant diagram of conduct. If the architectural project itself does not manage to make its projective relations explicit it acts to passively comply with the representational repressions of the professionalisation of the discipline. The objective of the formal workshops and individual student-led engagements conducted by the MSA projects studio is to attempt to increase the capacity of both the participants and the students through an embodied encounter where the students' (architectural) knowledge is expressed/constituted through an affect on the participant and *vice versa*.

Being explicit involves articulating a form of content and visualising a form of expression, because a representation will always reduce the form of content within the expression (or vice versa). The designed or directed process of sense making or sensation is produced in forms which are projected as an exterior of the architect/object and temporarily contained within the architect/subject, always both at the same time, and this defines both ethics and aesthetics as independent attributes of the project or diagram rather than the possibilities of one or other of the formal perspectives of the product or process.

If prior relations of difference are what constitutes the audience for our formal architectural productions then these differential relations also include the architect, not the other way around. The expertise of the architect is constructed from within the audience or community in which it sits and not from its outside as an external autonomous position or an inherent disciplinary expertise. By making these relations explicit there is no sudden loss of expertise or ability to be autonomous or individual, but the potential

of the relations are changed according to the nature of the project being enacted or embodied. The potential change in the diagram of relations of a pragmatic social and cultural situation occurs through the concrete encounters with those bodies embedded in that diagram. If there is new potential to be created and released then it can only occur through engagements that are external to a diagram that currently circumscribes those potentials. The process of composition of forms is not restricted to within the architect and their discipline and formal expressions from wider culture but is constructed in a living enterprise in relation to a constitutive project of collaboration.

This explicit, open situation of the discipline changes the understanding of a form of expression from merely a formal (more or less intellectual) representation of a physical reality to an embodied affect produced through relations outside of the body of the architect. If the production of an architectural affect is constituted as an external audience then architectural beauty can be understood as the construction of a particular form of subjectivity. In this case, architectural intention becomes the production of an abstract mechanism of aesthetic power which conditions that specific subjectivity to appreciate those actual affects. Such affects can only be understood in terms of expressive series in relation to diagrammatic causal structures - the repetition of differences which create concrete identities over time (through enduring across time) because of the fleeting dynamic nature of the constitutive relations of architectural production.

For example, Ian Burnett (MSAp 2009/11) became heavily involved in the Levenshulme community group, providing an architectural dimension in their campaign against closure of the local swimming baths through instigating discussions with the local community about the use and necessity of these facilities and making manifest alternatives to relocation and

demolition. Kimberly Medley (MSap 2008/10) appeared on Oldham Community Radio gathering local views on the town and the use of its dilapidated town hall. Her campaigning led to £2 million being raised for conservation and gained her a job with the conservation architects employed to work on the building (Alsop Butress Fuller). Collaborations such as these have continued in a number of cases outside the school with students finding practice in organisations invested in community engagement and urban regeneration (Hayley Chivers (nous); Emily Crompton (URBED)) or continuing project ideas in practice with collaborators they developed in school (Christopher Jaume (City Growing) with MCC Leisure; Kimberly Medley (Alsop Butress Fuller)). Others have become community and client liaison specialists in companies with this aspect within their portfolio (Ian Burnett (Five plus); Thomas Harrison (Landolt + Brown)).

However, the key point about the serial or reciprocal determination of the repetition of differences is that such individual actions towards a particular trajectory produce a diagram of operation in which new (non-habitual) forms of expression can be valued and created. The engagement work of the students and its multitudinous expressions has its own value but has also become part of a wider set of activities with an ostensible attitude towards 'public engagement'. Within the architecture school, an 'events' programme has become established as part of the school curriculum through the direction of my MSap teaching partner Helen Aston. This programme was made into a more externally facing engagement by her whereas previously it had brought architectural experts into the school. She has also been independently instrumental in producing a public space project for a key urban space in Manchester City called 'Atelier' working with the Office for Subversive Architecture (OSA) which was supported by the Head of School. This work has also led to her setting up an atelier group within the BA programme which follows a similar ethos of external engagement. Within



the faculty of Art and Design at Manchester Metropolitan University, highly public events we held at the Trafford centre and at Noise Lab on Market street attracted interest of other department heads and there now exists an externally facing, indeterminate unit in all programmes at undergraduate level which is called 'Unit X'. In addition, the involvement of the atelier staff and students in professional, funded research projects appears to have had the affect of legitimating our efforts to a wide range of people. Within the profession, changes in attitude have been felt with respect to external examiners responses to the work of the MSaP Atelier, moving from broad scepticism to explicit praise, and very recently we have begun working directly with the research department at the RIBA who are to theme their forthcoming year's research around ageing and cities - (see for example 'silver linings: The active third age and the city' 2014).

### Being, explicit

The Old Moat in an Age-friendly Manchester project was a pilot for the development of a participatory design and research methodology intended to be used across The City of Manchester and replicated as appropriate across the UK and beyond. Emeritus Professor Geoff Green, adviser to the WHO European Healthy Cities Network on Age-Friendly Cities described this research as 'world class' when we presented our work at the UK Urban Ageing Consortium Research and Evaluation workshop at the University of Manchester in May 2013. The work contributes to a Manchester City programme which 'has established itself at an international level as a leading authority in developing one of the most comprehensive strategic programmes on ageing' (John Beard, Director, Department of Ageing and Life Course, World Health Organisation). The £60,000 pilot project was funded by Southway Housing Trust to discover how age-friendly the Old Moat ward currently was and to involve the community with a broad range of stakeholders in working towards making it more age-friendly. The project

is now an explicit reference in Manchester City Council's Age-Friendly Manchester Development plan 2013-2015. It has led to a follow up commission in Cheetham Hill, North Manchester and other commissions in relation to ongoing improvement works in the Old Moat Area. The development of both the commission for this project and our ability to lead it are indirect expressions of the success of participatory design methodologies developed through the auspices of the Sharing the City: Generations together project.

The World Health Organization (WHO) age-friendly model emphasizes the theme of supportive urban environments for older citizens. These are defined as encouraging 'active ageing' by 'optimizing opportunities for health, participation and security in order to enhance quality of life as people age' (WHO 2007). Research in this area is especially urgent given that 'age-friendly' policy approaches assume that the quality of the urban environment is a significant factor in achieving a range of ambitious social goals such as neighbourliness and social cohesion. However, while the disciplines of architecture, planning and urban design are seen as key influences in transforming the quality of urban life, thus far, the debate around age-friendly cities has had marginal impact on practices within these disciplines - whether at the level of research or in the development of design methodologies applied to shape experiences of urban change.

In an attempt to address not only the specific issues regarding an increasingly aged and urbanised population this project has developed an interdisciplinary collaboration between urban design, architecture and social science intended to create new methodologies of research and practice to create a productive dialogue between design practices and social outcomes. This project engaged a broad spectrum of partners including third sector organisations and public agencies working together with residents of the

area. The research has been designed to enable, as far as possible, for the methodologies to be easily replicated elsewhere by creating three component parts: First, producing a full record of all findings (a research portfolio); Second, a 'toolkit' outlining all the procedures undertaken, providing templates (Age-Friendly City Research Toolkit) and third, a summary report which has been disseminated widely to both local residents and City policy makers. These documents are available online and are due to be further published and disseminated (White 2012) .

The project has explored how the composition of relations through collaborative practices can change a local diagram of territorial control to include a consideration of the desires of a group of older residents, as part of a wider group of concerned citizens who also have 'stakeholder' roles in private and public organisations such as housing trusts, transport providers and regeneration projects. The design-research methodology developed here has thus been described as 'inclusive urban design-research'. The *project* partially expressed in the Old Moat in an Age-friendly Manchester research is not concerned with pseudo-specific forms of expression such as particular shapes of generic benches, but how place specific forms can be actualised here and now as part of the generation of urban territory for economically, socially and physically marginalised citizens. The project team for this challenge to the habitual diagram of territory construction is widely formed and lies outside of each of the collaborative individuals in the process, but at the same time has relied on a consistent and unassuaged expression of discontent through the construction of positive alternatives. Our work continues this year with a new project in Cheetham Hill alongside the work of the students in the atelier and collaboration with members of the Age-friendly city research network preparing further research plans, for example for the EU Horizon 2020 call. Any Critical composition of relations of architectural production are required to be continually remade because it is

the construction of an alternative territorial assemblage through the repetition of the differences which challenge the existing territorial habit.

## P6 Critical diagrams, joyful speculation

Ethical joy is a correlate of speculative affirmation.

(Deleuze 1988a : 29)

An ethical activity can be understood to produce a joyful affect in the participating bodies insofar as it is an increase in their ability to engage with the world. Such opportunities for affective engagement are created through speculative - projective - practices which are defined through an active, directed opening to the outside of the habitual relations of the body (rather than a forced and submissive change to the habitus, which instead defines suffering). This *expressionist* understanding of the actively produced - potentially joyful - nature of reality is the primary principle of a Deleuzian design-research methodology. The five principles set out in the preceding chapters and summarized here may be considered as essential consequences of this ethical proposition of expressionism. The contention of a Deleuzian expressionist epistemology is that ethical contexts are produced through active engagements outside of the consolidation of existing individual and disciplinary territories in order to share, question and problematise dominant power relations. In this document I have defined and demonstrated the architectural *project* as a positive speculation which deliberately challenges dominant practices through the extension of the self

and its disciplinary membership outside of the habit of expert or authorial identity.

A project that insists on the reality of forms of content and expression, and thereby makes them explicit, exposes the specific and embodied power relations by which they are constructed. Including the 'audience' or 'user' in this active or constitutive manner threatens to change those representations considered commodious and thereby challenges the professional boundary of exclusion - where aesthetics as a cultural judgement of taste is the usual delineation. The production (making explicit) of forms of content serves to change the diagram of inclusion and acts to produce an ethical joy in the sense of sharing new powers. The manner in which such production can occur requires an embodied and intuitive engagement outside of the repetition or habit of the architectural body over time - an innovation or speculation which can also be considered Critical (with a capital C) in so far and in so long as it becomes a real distinction that endures in a body. The production of a form of content of a new form of expression through joyful speculation can only be an ethical act in so far as it forces a breaking of habit. Such speculations are occasions of difference which must be continually repeated before they slip back into nominal civility. An ethical act can only be considered such insofar as it positively speculates on the basis of the intuition of affects towards the production of a different world and an increase in the capacity for the otherwise.

The ultimate proposition of this document is that, subject to the ability to be affected by external relations without being destroyed, all creative processes emerge from the construction of relations outside of the bodies of their creators. It is the extent to which these creative - projective - relations can be 'made explicit', amidst a repressive, dominant representational paradigm, which constitutes the capability of architectural processes to both produce

intuitive knowledge and to be practiced in a manner that does not reinforce complicity with a reductive professionalization of the discipline of architecture.

This document does not seek to deny that architectural interiority must be challenged *within* disciplinary contexts in order for the individual and social capability for the production of appropriate forms of expression to advance and flourish. It instead attempts to augment the dimensions of any critically embodied design engagement with drawing by resisting the tendency to imagine that Critical practices are essentially embedded *within* such formal processes of actualisation just because they share the same world as the social and political formations influencing their endeavour. This expressionist design-research method proposes avoiding this inadequate essentializing of architectural creativity by simultaneously addressing the creative production of forms of content of expression alongside formal expression – and then insisting on the explicit participation of both forms in judgments of formal appropriateness.

The parallel genesis of forms of expressive behaviour seeking concrete affective relationships outside of disciplinary *practice*, interlocking with more contained engagements outside of a disciplinary *episteme* has been part of a deliberate and positive intent to mire the creation of this document amidst the pragmatic existential reality of living production. It has been undertaken in such a manner in order to set out the nature of design behaviours in which architects can *both* establish concrete affects productive of creative evolution *and* abstract conceptions of processes of active knowing - without generalising either. It walks a tightrope between maintaining a level of abstraction sufficient to discuss intuitions without representing them and insisting on a level of specificity of place and people which denies any essential character.

The principles for action set out above are summarised by principle six in so far as it serves to delineate a diagram of desire which positively directs or induces the active behaviours of openness and differential engagement required to continually: (1) insist on the Real status of affective distinctions and (2) to perform the consistent doubling of feeling and thought needed to (3) make explicit both the properties and capacities of creative situations (4) over-time as (5) interactive compositions of power. Deleuze's expressionism identifies Spinoza's 'beginning in the middle' as an affect which may best provide a felt understanding of the sense in which the principle of creative speculation leads to ethical joys. Developing intuitions about how to produce and share capacities in order to augment and increase the potential of a composition of bodies only remains an ethical activity in so far as those powers are themselves shared. Deleuze's insidious 'destructive' impulse occurs at this moment, when the representational accumulation (of the copies harnessing the simulacra) is once again productively reopened rather than consolidated. It is in emphasising the reality of this movement/moment that the Spinozist places a faith in the future rather than fixing their joy on the solidity of a (passing) present. Beginning in the middle' of a *continuous* process to 'bring motivations into the light' means always ending precisely here - and then starting again full of hope for a project which extends before and beyond the limits of this, particular, finite, mode of being.

The illustrations which follow show staff and students of the architecture school in Manchester in the middle of situations which have forced them to open up the discipline and themselves to the outside of habit. A brief selection shows a new generation of architects supported by an architectural institution (itself regularly monitored by disciplinary regulators) very precisely expanding their architectural capabilities through embodied and affective engagements towards the outside of established understandings of patronage, initiation, expertise, collaboration and citizenship. Links to a

collection of documents showing much greater detail of an increasing and ongoing range of engagements and initiatives of individual students as well as of the MSA projects atelier and its staff are maintained at [www.projects.msa.ac.uk/](http://www.projects.msa.ac.uk/). This website also maintains links to the professional research project documents referenced in this chapter.





**Figure 68\_**  
**Engagement example 1**  
Sara Dowle in Old Moat



**Figure 69\_**  
**Engagement example 2**  
Market Street exhibition



**Figure 70\_**  
**Engagement example 3**  
Scott Bearman, British Youth Parliament workshop at Manchester  
Town Hall





**Figure 71\_**  
**Engagement example 4**  
Piccadilly gardens, 'Blind brunch', Christina Gregoriu

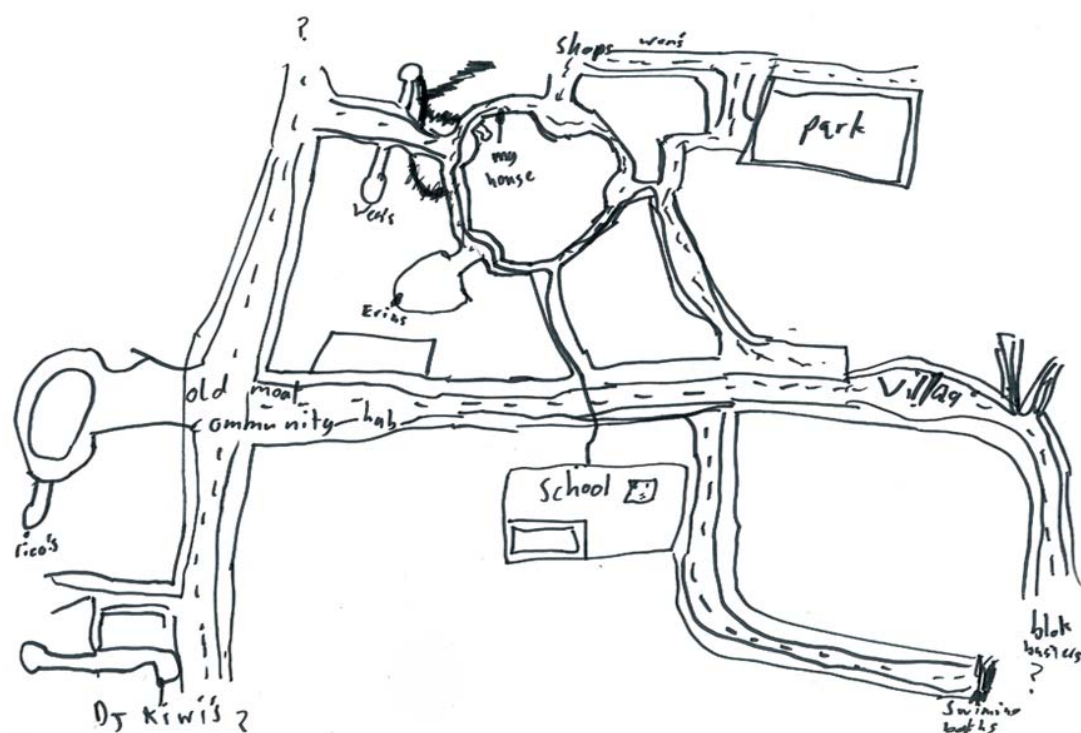


Figure 72\_  
Engagement example 5  
Old Moat primary school workshops





**Figure 73\_ Engagement examples 6,7**  
Stroke Society, Derin Kerigil (top); Nostalgia film show, Jordan Taylor-Moore



**Figure 74\_**  
**Engagement example 8**  
Phillipa Birch working at Rusholme Job Centre





**Figure 75\_**  
**Engagement example 9**  
The Minehead dementia day care centre, May Ling Nuttman



**Figure 76\_**  
**Engagement examples 10,11**  
MIND Christmas lunch, Fran Fernandes (top); Scott Avenue  
Allotments, Christopher Jaume





**Figure 77\_**  
**Engagement examples 12,13**  
 Circus School, Hayley Chivers (top); Northern Quarter Art, Rachel Bourne



**Figure 78\_**  
**Engagement examples 14,15**  
 Levenshulme transformation, Nadia Khalife (top); Sharing the city  
 'January Sale', Trafford Centre





**Figure 79\_**  
**Engagement examples 16,17**  
Piccadilly Gardens, Natalie Harris (top); Chorlton Valuing Older people forum, Tommy Harrison



**Figure 80\_**  
**Engagement examples 18,19**  
Irk Valley Crazy golf, John Cunningham (top); St. Peter's Sq.,  
Emily Crompton





**Figure 81\_**  
**Engagement examples 20,21**  
Brighton Grove Allotments, Thomas Petch (top); Contact Theatre,  
Sharlene McFarlane

## Endnotes\_

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- 1 This quote from 'The Fixer' by Bernard Malamud is shown on the first page of Spinoza: Practical philosophy (1988a).
- 2 The word 'Aspect' is more accurate than 'Part' or 'Section' because it denotes the complexity of the relationship between these three items or concepts and the consideration of the mode by which they are viewed or examined in relation to time. For example, in linguistics, rather than locating an event or state in time, the way tense does, Aspect describes '*the internal temporal constituency of a situation*', or in other words, aspect is a way '*of conceiving the flow of the process itself*' (Comrie 1976).
- 3 In relation to this specific point see page Xvii. Deleuze describes Spinoza as the connection between himself and Guattari on a number of occasions.
- 4 Many commentators describe Deleuze's early works reappraising the work of a number of less celebrated philosophers as an attempt to construct an alternative history of philosophy – e.g. Michael Hardt in Gilles Deleuze: An Apprenticeship in Philosophy (1993). The terms minor/minoritarian is a reference to Deleuze and Guattari's concept of 'minoritarian politics' developed in Kafka: Toward a minor Literature (1986).
- 5 An excerpt from The Fold: Leibniz and the Baroque (1993) was published in the 1993 Architectural Design Magazine entitled 'Folding in Architecture'; edited by Gregg Lynn, a computer literate protégé of Eisenman, it also included an essay by Eisenman about his Rebstock park project, entitled 'Folding in Time' (Lynn 1993: 23).
- 6 See Diane Ghirardo's account of Eisenman's practice in 'The Architecture of Deceit' (1984).
- 7 There is much debate amongst Deleuzian scholars as to the relative importance of different aspects of Deleuze's oeuvre. For example, Dan Smith and others highlight the importance of Leibniz for Deleuze through the relationship with the concept of calculus, which is central to the articulation of his position in Difference and Repetition (1994). See for example Dan Smith's contribution in Duffy (2006), Virtual Mathematics: The Logic of Differences. I concentrate here on the connection to Spinoza to avoid digressing into a discussion of mathematical concepts, apart from noting a link with the concept of *problematics* because of the connection with mathematical formalisms pertinent to the discussion of Peter Eisenman in chapter four.
- 8 The centrality of Deleuze's reading of Spinoza to his philosophical project is strongly suggested by the publishing of his secondary doctoral thesis Expressionism in Philosophy: Spinoza (1992) immediately following his primary doctoral thesis Difference and Repetition in 1968 where he first makes explicit his own philosophical position. This was followed by publication of a more concise explication of Spinoza in Spinoza: Practical Philosophy. The continuing importance of Spinoza in his later works (especially his collaborations with Felix Guattari, which also began at the time Deleuze's two Doctoral theses were published) is also suggested by the republishing of 'more complete' version of Spinoza: Practical Philosophy in 1981 coincidentally with the second part of their two-volume joint work Anti-Oedipus: Capitalism and Schizophrenia (1984); by Deleuze's simultaneous series of lectures on Spinoza at the Paris Vincennes University in the 1980s; and finally by Deleuze's explicit claim that he and Felix Guattari both considered themselves 'Spinozists'. There are also two published essays on Deleuze's position on Spinoza: 'Spinoza and the Three Ethics', and 'The Three Kinds of Knowledge'. The first focuses more on the way The Ethics is written and the differences between the five books which comprise The Ethics. The second is formed from a selection of Deleuze's Vincennes lectures (Deleuze 1978).
- 9 Leibniz is discussed in the final chapter of Spinoza: Expressionism in Philosophy, the content of which is expanded in The Fold: Leibniz and the Baroque.
- 10 A concept borrowed from Martha Nussbaum describing areas of agreement between oppositional ideologies. See Creating Capabilities: The Human Development Approach (2011).

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11 Actually three, but in this epistemological reading his third aspect 'the building as research' is a direct consequence of myth one.

12 Murray Fraser edits this collection of contributions addressing the difficulties and varieties of design knowledge and their relationship to research in a recently published series connected with PhD by design programmes around the world (including the programme at UCL to which this PhD belongs).

13 For example Denton Corker Marshall, established in Melbourne in 1972, were part of the forums established by van Schaik, are the architects of the Manchester Courts of Justice (nominated of the RIBA building of the year 2007) and the subject of a monograph by him.

14 Rather than referencing later works which directly address cultural productions– e.g. cinema in Cinema 1 (1986) or painting in The logic of sensation (1981).

15 Chapter two has been published in a much altered form following presentation at the AHRC 'Agency' conference in Sheffield. (White 2009).

16 *'With the notion of the differential relation, Deleuze takes the concept of difference to a properly transcendental level: the differential relation is not only external to its terms (which was Bertrand Russell's empiricist dictum), but it also determines its terms. In other words, difference here becomes constitutive of identity, that is, it becomes productive and genetic'* From 'Logic and existence: Deleuze on the Conditions of the Real' (Smith 2012: Essay 5).

17 This reference indicates locations where these ideas are explored in Difference and Repetition, however, this is very brusque restatement of a broad set of Deleuzian ideas which I will explore in detail with respect to Spinoza in Chapter one.

18 For example, it is discussed by Somol and Whiting with respect to Koolhaas as well as by Vidler with respect to Eisenman.

19 The use of the term 'project' in this way was brought to my attention by Professor Jan Verwijnen in relation to discussion regarding the use of the diagram in the work of Rem Koolhaas.

20 As Evans witheringly refers to it. See (Evans 1997: 32).

21 See Michael Hardt in The Affective Turn (Clough 2007).

22 As published in Feints (2006) showing his view of its contemporary relevance rather than its recent publication as an historical artefact.

23 It is in this latter work where Deleuze borrows a conceptual distinction from the Danish linguist Hjelmslev in order to insist that both content and expression should be seen as forms, only from different (simultaneous and embodied) sense-perspectives as 'form of content (of expression)' and 'form of expression'. These concepts, 'Form of Content (of expression)' and 'Form of Expression', allow me to establish a terminological consistency across Deleuze's work on Spinoza and Foucault and the use of the term 'diagram' in particular with respect to the architectural discourse around the work of Eisenman. See Deleuze and Guattari (1992) especially '587 B.C.-A.D 70: On Several Regimes of Signs' pp11-148 (141).

24 The translation takes the French 'plan' to mean both a plan and a plane and uses these two terms to distinguish between plan of organisation and plane of composition –noting that the French 'plan' also refers to the English term 'map'.

25 Attributed to the prevalence of the philosophy of René Descartes (1596-1650)

26 This is a general point, which is discussed in detail in relation to specific features of the work of these philosophers and others throughout Difference and Repetition for example, for Deleuze's discussion of the position of Kant, see page 136. A more detailed engagement with Deleuze's critique of Descartes is undertaken here in chapter two.

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27 Deleuze concentrates on the political and philosophical consequences of Cartesianism, which he sees as acting to both suppress difference and simplify conceptions of time, but he also argues that they have practical implications. Through references to the physical and social sciences in his later work, his assertions of the practical limitations of the scientific method of Cartesianism are explicitly and implicitly supported by a number of esteemed, contemporary scientists and philosophers of science across a range of disciplines such as (Complexity theory/ evolutionary biology - e.g. Kauffman 1995), (chemistry - e.g. Prigione 1996), (Cosmology - e.g. Smolin 2000), (philosophy of science - e.g. Stengers 2010) (biology - e.g. Rosen 1991) and (Social science - e.g. Latour 2007).

28 The full quote reads: *'The theory of thought is like painting: it needs that revolution which took art from representation to abstraction. This is the aim of a theory of thought without image.'*

29 Deleuze refers to 'the stranger'; the edition of Plato referred to here has the translation 'visitor'.

30 I expand on Deleuze's approach to the simulacrum in Chapter four in relation to differentiating Eisenman's specific interpretation from that of Deleuze.

31 This is a key interpretation of Durie see 'Immanence and Difference: Toward a Relational Ontology' (2002). Durie identifies 'difference' here as a mis-translation by Patton in the English edition of *Difference and Repetition*. Durie finds in the original French version "indifférence", which makes more sense in Deleuze's account, since his concern in that part of the text is to establish the importance of the reciprocal determination between the virtual and the actual, and is further evidenced by the fact that the following sentence discusses the nature of this interdependence.

32 Lawler makes this precise connection between the concepts of simulacra and affect in *Thinking through French Philosophy* (2003). I will discuss this in more detail in the next part of the chapter as the differential relation between bodies in composition.

33 For these concepts of differences of degrees and differences in kind – or 'quantitative or qualitative multiplicities' – Deleuze is inspired by his reading of Bergson, *Bergsonism* (1988b) was published just prior to his doctoral theses. He borrows the notion of 'a theory of distinctions' and associated terminologies. See Durie 'Creativity and Life' (2002a) for a fuller commentary.

34 In the original text of *Difference and Repetition*, Deleuze uses two terms *Differenciation* and *Differentiation* to designate the doubling of difference.

35 Deleuze makes this interpretation of Spinoza through the lens of Bergson and makes a distinction here between intensive difference (intrinsic modes) and extensive difference (extrinsic modes).

36 I refer to these two features of a body also as capabilities and properties in chapter three to follow the subject matter of intellectual properties (and capabilities) but noting that DeLanda use these terms in his explanation of Deleuzian ontology in *A New Philosophy of Society: Assemblage Theory and Social Complexity* (2006). However, Deleuze appears to avoid using more readily understood terms such as these in order to emphasise the interactive nature of kinetic and dynamic relations in a body.

37 The full quote reads: 'Every mode of thought insofar as it is non-representational will be termed affect.'

38 In the chapter he discusses these processes in the context of geology, describing 'the Earth' as the whole of nature, a realm of unformed potential, which is simultaneously and inevitably subject to processes of stratification and sedimentation. This later work of Deleuze is a continuing explication of the principles which he develops in his reading of Spinoza, at once indicating how Spinoza influences these later texts and also demonstrating how his particular 'Diagram' of expressionism is the informal force behind the production of all his work subsequent to *Spinoza: Expressionism in Philosophy* – each instance does not resemble this diagram, but does have an essential relationship to it.



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39 For example see the Gulf of Maine Research Institute for first-hand accounts of lobster mating rituals – they are spectacular. <http://www.gmri.org/> [Accessed 090211].

40 Durie uses this explanation in 'Immanence and Difference: Toward a Relational Ontology' in order to demonstrate Deleuze's differential reading of Spinoza, and I follow his account here since it succinctly summarises Deleuze's chapter/ series 3 from Logic of Sense.

41 Language in general.

42 Speech as a specific example of language.

43 A term coined by Bill Hillier according to Forty (2000). When Rowe uses 'Paradigm' he assigns it to the Platonic ideal form in opposition to empirical determinations of function as 'Programme' see The mathematics of the ideal Villa (1997) and As I Was Saying (1996).

44 Somol contributes to Eisenman and Koolhaas's books – Diagram diaries / Content. Whiting used to work for Koolhaas, and Hays is a close associate of Eisenman.

45 Likewise Hilde Heynen characterises the Tafurian Critical tradition as insisting on always asking questions such as '*who is building and for whom?*' and argues that while the Critical tradition is exemplified by Tafuri, the conception of critical architecture as '*one that strives to improve social reality*' is not the only one. She also ascribes the predominant 'alternative' tradition as centred on the position of Hays (See Heynen 2007: 49-50).

46 According to Ghirardo, Eisenman made repeated attempts to co-opt Tafuri and his followers, attempting to produce a theoretical retinue to support and augment authority in the discipline, which Tafuri resisted contributing to by cutting off communication in 1980 (2002).

47 They conveniently misrepresent the title of Tafuri's book to which this refers, which was: Architecture and Utopia – Design and Capitalist Development (1976).

48 A trajectory of Rawes shared with Deleuze through their respective readings of Spinoza.

49 For example by adding a constant vector to all coordinates of a mathematical object, thereby changing its origin point within the coordinate system, but without changing either the object or the system itself.

50 Oxford English Dictionary online (<http://www.oxforddictionaries.com/definition/translation?view=uk>) [accessed 09-02-2011]:  
Pronunciation: /trans'leɪʃ(ə)n, tra:ns-, -nz-/noun (mass noun)  
(3) *formal or technical: the process of moving something from one place to another: the translation of the relics of St Thomas of Canterbury. Mathematics: movement of a body from one point of space to another such that every point of the body moves in the same direction and over the same distance, without any rotation, reflection, or change in size.*

51 This is Deleuze's attempt at a joke as the statement is provocatively presumptuous.

52 Which in itself is a reference to the MENO dialogue of Plato.

53 Paraphrase of Descartes' Meditation1 section 20 (see Hatfield 2003: 125) - Full quote:  
'*The first was never to accept anything as true if I did not have evident knowledge of its truth; that is, carefully to avoid precipitate conclusions and preconceptions, and to include nothing more in my judgments than what presented itself to my mind so clearly and distinctly that I had no occasion to doubt it. The second, to divide each of the difficulties I examined into as many parts as possible and as may be required in order to resolve them better. The third, to direct my thoughts in an orderly manner, by beginning with the simplest and most easily known objects in order to ascend little by little, step by step, to knowledge of the most complex, and by supposing some order even among objects that have no natural order of precedence. And the last, throughout to make enumerations so complete, and reviews so comprehensive, that I could be sure of leaving nothing out.*'

54 In the logical sense: A proposition = a predicate + a subject, where a predicate is a true or false declaration.

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55 For example, Evans describes how the tile pattern on the floor of the Royal chapel at Anet appears to be a plan drawing of the form of the dome, but a complete correlation would not have looked right because of the affect of perspective – an adjustment had to be made to address the viewer, an embodied judgement which is made outwith the system of projection of the drawing process where the viewer is only analogous to the picture plane see Translations from Drawings to Buildings (p174).

56 They look real but have not been lodged.

57 This appears to be OMA's competition entry for the Nederlands Institute of Architecture.

58 For example, the first in the book concerns the notion of 'Social Condenser', which references Koolhaas' studies into Russian Constructivism in the 1970s, borrowing this concept to describe the project for OMA's entry for the Parc de La Villette competition; the text claims: *'Instead of treating the park as the opposite of the city [...] this approach demonstrates that the park can sustain programme with superior ease'* (Koolhaas 2004: 73). In addition to the specific references to particular buildings and applications there is a broad theme across the patents that questions the nature of architecture as a production of specific or generic knowledge and forms, especially when it operates or is understood at an urban scale. Many of the other texts in the applications make allusions to positions in Koolhaas' theoretical works such as Delirious New York (1994).

59 Therefore an analytical caution must be applied even when referring to ostensibly serious theoretical pieces. For example Koolhaas characterises his essay 'junkspace' as a parody of a certain kind of architectural writing in the same interview.

60 Koolhaas refers to his earlier training as a journalist in the same interview.

61 Professor Jan Verwijnen was 'chef de bureau' at OMA Rotterdam during the construction of the Kunsthall project. The Loop-Trick patent and relationship to the Kunsthall was brought to my attention by him in conversations before his untimely death in October 2005. (Verwijnen 2002).

62 This example is used as lesson 4 on the Design Council website, instructive of the idea that strong IP cannot immunise the designer from infringement claims however spurious or illegitimate. Quote: *'Architect Rem Koolhaas was commissioned to design the Kunsthall in Rotterdam in the late 1980s. A member of his staff, recently graduated, had previously produced certain plans as part of a student project. He alleged that Koolhaas' design of the Kunsthall infringed copyright of those plans in 52 ways. Expert evidence was provided in court, pointing out similarities. The court rejected the claim as 'pure and preposterous fantasy''* (Design Council 2007).

63 <http://garethpearce.info/>

64 *'In 1774, the House of Lords ruled in Donaldson v Beckett that perpetual copyright was illegal: they concluded that no natural law of copyright existed and that copyright was a purely statutory right created for the utilitarian purpose of encouraging literary efforts'* (Gowers 2006: 14).

65 Professor Jacques Cohen quoted as saying: 'There will be no end to what corporations may claim to own. A few years ago it was the gene sequence, now it is embryonic growth. Next year it may be one's heartbeat or the synapse.' [http://www.guardian.co.uk/science/2013/may/25/embryologist-attacks-cell-cycle-](http://www.guardian.co.uk/science/2013/may/25/embryologist-attacks-cell-cycle-patent?INTCMP=SRCH)

[patent?INTCMP=SRCH](http://www.guardian.co.uk/science/2013/may/25/embryologist-attacks-cell-cycle-patent?INTCMP=SRCH) accessed 16/05/13

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66 The way these distinctions are made and argued is central to the way knowledge is categorized and valued and ultimately control development and trade at an international level. Most of the arguments over intellectual property therefore dispute what is included and excluded from this balance, with large multinationals such as Amazon wanting to patent not very particular types of shopping on the internet (for example, Amazon patented a one-click method for purchasing online: 'Method and System for Placing a Purchase Order via a Communications Network', US Pat No 5,960,411, Sep 28, 1999, quoted in Kinsella (2001)) whereas developing nations are not best served by these protective practices: *'There are legitimate reasons for being concerned about the highly protective standards that have emerged recently in the United States and the European Union. These laws and juridical interpretations provide broad patent protection for software and biotechnical inventions. They also provide extensive rights in the formulation of databases, which could have a negative effect on scientific research. It remains to be seen whether such standards excessively tilt the balance within those jurisdictions towards the private rights of inventors and away from the needs of competitors and users. It is not too early to claim that they are inappropriate for developing economies and net technology importers'* (Maskus 2000: 237).

67 For example, a battle is currently being fought over patents of elements of web browsing software in the US patent office. Quote: *'Software patents, are, will remain, and are set to become ever more controversial as more court cases with potentially huge implications come to a head. Large numbers of amazingly broad and ambiguous patents have been approved by the USPTO and people on all sides see this case as setting the standard by which other patents will be dealt with in the future'* (McCarthy 2003).

68 Illustrations taken from the ARB report requested by Judge Jacob examining the expert witness (Salisbury 2003: 118-119).

69 This form of argument is interesting because it attempts to use the legitimisation of representation to account for non-representational knowledge – using the mathematics of chance to make a qualitative judgement reasonable.

70 The OMA design for the NIA has a square based tower with similar proportions in elevation.

71 It was accepted in the case that Pearce had been asked to leave his portfolio after interview so that it could be shown to Mr Koolhaas.

72 Nederlands Institute of Architecture archive: [http://en.nai.nl/collection/view\\_the\\_collection/item/\\_rp\\_kolom2-1\\_elementId/1\\_131568](http://en.nai.nl/collection/view_the_collection/item/_rp_kolom2-1_elementId/1_131568).

[Accessed 16/04/14]

73 A journalistic nomenclature for the Swiss-Re Building by Norman Foster Associates, which is strongly associated with London and its skyline by Londoners and tourists alike.

74 There are a number of collections of his earlier written work (e.g. Eisenman Inside-out: Selected writings (2004)) which discuss architecture using concepts taken from Jean Baudrillard, Noam Chomsky, Michel Foucault, Sigmund Freud, and Manfredo Tafuri - amongst others - but these theoretical investigations tend to consist of essays published alongside the design work as he becomes an increasing successful practicing architect. Recent monographs contain descriptions of projects, accompanying essays and invited critiques from a wide range of architects, theorists and philosophers. These include Blurred Zones (2003), Feints (2005) and Tracing Eisenman (2006) - all of which have content that relates his work to Deleuzian theories (affect, diagram, diagrammatic) as well as those of Rosalind Krauss and Charles Peirce (the concept of indexical signs), and Jacques Derrida (the concept of the trace, the meta-physics of presence, motivated signs).

75 Eisenman said this himself in a debate with Alexander: *'It was his Ph.D. thesis, which was to become the text of Chris's first book, "Notes on the Synthesis of Form". The text so infuriated me, that I was moved to do a Ph.D. thesis myself. It was called "The Formal Basis of Modern Architecture" and was an attempt to dialectically refute the arguments made in his book'* (Katarxis n.d.).

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76 Formalist approaches to language developed in the Moscow and Prague schools of literary criticism are associated with the origins of structuralism alongside developments in American schools of literary criticism and the development of mathematical formal systems (Deleuze 1995: 170) (Lecercle 2002: 27). Formalism in mathematics is most strongly associated with the work of Bertrand Russell and Alfred North Whitehead, however the work of Kurt Gödel (the incompleteness theorem) had already undermined this approach in mathematics itself in the 1930's - but not its use in other disciplines such as architecture (Duffy 2006: 154). Formalist approaches to literature which had developed into structuralist linguistics were prevalent in the US up until the 1970's and the approach of Noam Chomsky is credited with decades of dominance since, although the development of a definitive linguistic formalism remains highly contested with numerous factions. The Moscow Linguistics Circle was co-founded in 1915 by the Russian linguists Roman Jakobson (1896-1982) and Pjotr Bogatyrev (1893-1971). Together with the Petrograd Society for the Study of Poetic Language (Opoyaz)-which included Victor Shklovsky (1893-1984), Yuri Tynyanov (1894-1943) and Boris Eikhenbaum (1886-1959) - who's work on Formalist approaches I reference later - the Moscow school was the origin of Russian Formalism. When Formalist criticism was suppressed in the early 1930's by the Russian government, Jakobson emigrated to Czechoslovakia and became part of the Prague Linguistic Circle, which developed along with Nikolai Trubetzkoy the concept of Phonology making a significant contribution to the development of structuralist approaches - for an account of the history of this development see (Matthews 2001).

77 The references in his theoretical work are made with respect to linguistic theories from a range of theorists bridging two main periods. The earlier part of his career makes reference predominantly to structuralist linguistics especially through the work of Noam Chomsky and the later part until present makes reference to theories labelled post-structuralist especially through the work of Jacques Derrida. For a historical account of the complexity of these terms in linguistics see (Matthews 2001).

78 House projects beginning with House I (1968) up to Fin D'Ou T Hou S (1983).

79 Structuralism as a linguistic theory has correlative but divergent histories in the European and American traditions, although few would directly accept the label 'structuralist' today it still exerts great influence on both sides of the Atlantic. In particular Marxist schools of philosophy and the social sciences in Europe - '*the conjunction of formalism and Marxism*' (Lecercle 2002: 19) - have responded to the methodologies and understandings promoted by structuralism and have extended and critiqued these positions to include numerous concerns which are now loosely collected due to this heritage and divergence under the banner 'post-structuralism'. The work of Gilles Deleuze can be assigned to the post-structuralist category because he utilises methods, terminologies and concepts that are extended from within this tradition, although Deleuze also draws on inspiration from Anglo-American pragmatic tendencies in the debate (Deleuze 1995: 170-203).

80 Working with Derrida first on a competition for La Villette in 1987

81 An explicit connection between Eisenman and the theories of Deleuze occurs in the 1991 AD publication of *Folding architecture* (AD 1991). Eisenman contributes several projects to the collection which also includes an English translation of an excerpt 'The pleats of Matter' from Gilles Deleuze's book entitled *The Fold: Leibniz and the baroque*. The *Folding Architecture* volume demonstrated an intersection between a growing interest in computational design techniques and an awareness of the work of Gilles Deleuze. One of the projects explicitly described as employing a Deleuzian concept of fold is Rebstock park. This project is also the subject of an investigation by the philosopher James Williams and will be discussed in more detail in the third part of the chapter.

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82 As I will show later, Eisenman's references to Deleuze relate more to geometrical concepts and reasoning in relation to computerised production than to Deleuze's post-structural linguistics. This is interesting to note, because Eisenman has made consistent use of linguistic theories of the semiotician Charles Peirce's notion of 'the index' with respect to the work of Rosalind Krauss and as Deleuze also references Peirce this would seem to offer the most ready coincidence of terms and approaches. Although as Jean-Jacques Lecercle explains Deleuze has not written an explicit and isolated theory of linguistics (Lecercle 2010).

83 For example Brian Massumi and Manuel De Landa contribute with essays which make connections with the philosophy of Gilles Deleuze in a publication by Lars Spuybroek (Spuybroek 2004).

84 Other philosophers make positive connection with his work too. E.g. John Rajchman, see 'Perplications' in (Eisenman 2003(a): 114-23).

85 This literary and linguistic promiscuity has generated a massive volume of writings about and in response to him and his contributors. An online bibliography of publications by and about him referenced by his practice website contains over 1500 references and relates to a massive physical archive kept by the Canadian Centre for Architecture: *'an archive of over 50,000 drawings, prints, models, photographs and 130 linear feet of documents for 150 projects covering Eisenman's practice from the late-1950s to 1998, and incorporating student work and all material, including conceptual and design development drawings, for [...extensive list of projects beginning with] House I [and ending with...] Max Reinhardt Haus; and the Holocaust Memorial competition, Vienna.'* His own website also has over 1500 references: [http://www3.cca.qc.ca/pages/Niveau3.asp?page=eisenman\\_intro&lang=eng](http://www3.cca.qc.ca/pages/Niveau3.asp?page=eisenman_intro&lang=eng) [accessed 10/06/11]

86 The full quote reads: *'If the pattern is formed for the purely practical purpose of communication, then we are dealing with a system of practical language (the language of thought) in which the linguistic pattern (sounds, morphological features, etc.) have no independent value and are merely a means of communication. But other linguistic systems, systems in which the practical purpose is in the background (although perhaps not entirely hidden) are conceivable; they exist, and their linguistic patterns acquire independent value'* (Eichenbaum 1926).

87 Eisenman follows Chomsky's notion of linguistic transformations which describe a kind of knowledge based on an innate grammar which is transformable in contemporary creativity. This concept of generative grammar operates across the two realms of competence and performance (Matthews 2001). Consequently, Palladio is cast as a poet writing new - 'ungrammatical' - sentences, which nonetheless have a correct (understandable) sense because he intuitively the essential transformations which can be applied to the existing language and its grammatical structure in order to produce acceptable, yet previously unspoken (transgressive) sentences.

88 The full quote reads: *'We do not experience the commonplace, we do not see it; rather, we recognize it. We do not see the walls of our room; and it is very difficult for us to see errors in proofreading, especially if the material is written in a language we know well, because we cannot force ourselves to see, to read, and not to "recognize" the familiar word. If we have to define specifically "poetic" perception and artistic perception in general. then we suggest this definition: "Artistic" perception is that perception in which we experience form—perhaps not form alone, but certainly form'* (Eichenbaum 1926).

89 Deleuze places an emphasis on a problematic approach to deduction, in order to remain consistent to the notion of difference-in-itself. The correlation between representational thought and axiomatic as 'reducing difference and presupposing solutions' and non-representational thought with the concept of 'respecting the being of the problem' are different forms of expression of very similar forms of content. See (Deleuze 1994: ch3).

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- 90 The critique made by Wittgenstein is epistemological rather than instrumental - it principally concerns the inadequacy of the intellectual ambition of the formalism to correlate to everyday experience. Eisenman and the axiomatic literary formalists appear to believe that they avoid the epistemological problem raised by Wittgenstein by absolutely denying any connection to everyday experience outside of the discipline – and by defining the discipline therefore as everything that is not everyday experience.
- 91 Such arguments are still current because what was collected as Saussure's 'Cours' was in fact based on a record of a series of lectures noted by students, and is still open to interpretation, of which Thibault is considered authoritative and innovative – see (Matthews 2001) and (Thibault 1997).
- 92 In structuralist linguistics, the study of language is most commonly divided into an historic account or a present account, echoing Saussure's own calls to analyse language either diachronically or synchronically. This structuralist distinction separates these two aspects out of a perceived methodological necessity: in order to construct a formalism, there must be assumed to be a fixed object of study, and this is what produces the synchronous or static understanding. Then, in addition, diachronic studies may be made of the transformations of language over time, and whilst related they are to be seen as independent in order to proceed with a project of formal analysis. The feature of any axiomatic system most commonly removed or reduced in order to simply describe it, is dynamics or time see (Rosen 1991) for a mathematical exposition of how axiomatic systems remove time.
- 93 A risk he also associated with the 'Rhizomatic' approach of Deleuze (and Guattari), although he makes the comment in reference to Derridean accounts of architectural approaches as espoused by Eisenman: see *The Sphere and the Labyrinth* (1987).
- 94 Carol White summarises the situation thus: *'Heidegger claims in Being and Time [...] at least since the days of Plato and Aristotle, we have taken "to be" as signifying "to endure through time". Even the Forms and God are real in an eternal "now" which encompasses all worldly "nows". Something is not taken to be "really" real unless it is at some moment of time, that is, unless it has presence at some present. We might take this claim as an obvious truism.'* (White 1996)
- 95 Both Derrida and Deleuze refer to the Phaedrus dialogue (where Socrates undertakes a definition of the Sophist) when producing a critique of Platonism (Plato 1997: 506).
- 96 The full quote reads: *'For Derrida, the father is not the same but pure heterogeneity, and the false suitor, the simulacrum, is not difference itself but the same – but here understood as contamination'* (Lawlor 2003: 128).
- 97 This example of Deleuze deliberately recalls the Spinozist distinction between nominative and real.
- 98 <http://oxforddictionaries.com/definition/english/topology> [Accessed 15/12/13]  
*Definition of topology. noun (plural topologies)*  
*1 (mass noun) Mathematics the study of geometrical properties and spatial relations unaffected by the continuous change of shape or size of figures.*
- 99 Eisenman means this in relation to Noam Chomsky's notion of 'transformative grammar' rather than a mathematical transformation.
- 100 Deleuze argues that attempts to go beyond dualist thinking tend to be based on a privilege over one side or the other, expanding the notion as far as possible either inwards (intrinsically) towards God or outwards (extrinsically) towards absolute chaos (He gives examples in this regard of Kant or Hegel respectively). In addition, Deleuze argues that whilst these two approaches characterise the attempts to move beyond the dualism, they also characterise the continual project to expand its limits. It is this positive project which Deleuze draws on in order to construct his alternative approach (Deleuze 1994).
- 101 Composing as in a composition of bodies in Spinozist terms, but literally bringing these two beings, bats and architects, together through the structure of the competition.
- 102 Deller's term when asked to describe his artistic role in the project (Deller 2008).

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103 Jane Rendell writes in reference to Deller's re-enactment of The Battle of Orgreave: 'By drawing on the importance of history in our understanding of certain sites, this work of Deller's shows how an act of remembering the past can reconfigure a particular place as a critical space in the present, 'placing Deller's project in terms of a Critical Spatial practice that 'In attempting to recreate a political struggle that took place at a specific moment, points to the importance of time in the practising of place as space' (Rendell 2006). Deller's most recent work, 'What It Is' enables members of the public to talk to 'people who have first-hand experience of Iraq' (Deller 2009).

104 The Turner prize judges praised Deller for '*generosity of spirit across a succession of projects which engage with social and cultural contacts and celebrate the creativity of individuals*' (Tate 2004). This was interpreted as damnation with faint praise by the popular press, which scoffed at Deller's acknowledged inability to paint and draw (Crabb 2004).

105 What Deleuze calls the third kind of knowledge in his Spinoza lectures (Deleuze 1978).

106 Spinoza's name for when reason becomes habitual and replaces further acquisition of knowledge.

107 For example, second place in the Annual Japan Architect Shinkenchiku residential design competition (Sejima 1996: 223-245).

108 A form of plastic – ethyltetrafluoroethylene – with high corrosion resistance and strength over a wide temperature range.

109 Eisenman's critique of the post-critical position which references Deleuze is that it assumes that diagrams are '*already social*' *Diagram Diaries* (1999).

110 Full quote from Bat House Project jury report: 'It successfully negotiates the relationship between the tree-covered bank, where bats can fly out into cover, and the lake where certain species will feed, and where the water will keep the lower space cool and humid.'

111 Quote from Bat Conservation Trust guidance '*Where is the best place to position the box? To increase the chance of it being used, locate the box at a site where bats are known to feed, that is sheltered from strong winds and exposed to the sun for part of the day. Warm roost temperatures are important in summer to pregnant and lactating females and their young. In winter bats need constant cool temperatures for hibernation. Ideally, put up two or three boxes facing in different directions to provide a range of temperature conditions. For example, boxes facing from south-east to south-west allow the sun to fall on each box for part of the day. During very hot days a south-facing box may overheat, but the other boxes should have some shade during the day*' (Bat Conservation Trust 2003).

112 MSAp self-publications are included in a CD as an electronic appendix.

113 The 'Towards an ageless city' project was described as follows: '*MSA projects has an ethos of engaging in a process of conversation and interaction with the actual people concerned with or affected by the issues we tackle, in the belief that this will produce more relevant and problematic work than if we abstracted the site as physical entity, imagined its cultural import from the outside, or critiqued it without positive intent[...] The desire for such pragmatic engagements is driven by the idea that sophisticated architecture is developed through the forming of relationships, and is not simply a matter of shape or proportion. We see the site of architecture as not just the physical boundary or "place" but including all of the people, communications and relations which give that place its significance*'. From 'Large Print, Little Ideas vol 1 2007/8'.

114 A term for the system of presentation and feedback used in many architecture schools

115 intergenerational engagement is a term promoted by the Beth Johnson foundation. <http://www.centreforip.org.uk/> [accessed 12/04/13]

116 The collaboration continued the following year (2008/9) under the title 'The relational city' which generated workshops, opportunities for visiting critics, exhibitions and volume two of the 'Large print, Little ideas' publication.

117 The project description explicitly addresses its potential impact as follows:

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*'Formal and informal collaborations with Manchester City Council over the last three years have highlighted architecture and urban design issues with respect to health inequalities at a governmental level. This year a formal collaboration funded under the Cabinet Office 'Generations Together' programme has engaged over 200 members of the public through workshops and presentations in urban design issues relating to social inequalities. Ministers have visited projects in the Manchester Generations Together programme and have been presented documentation of previous work and current research. Council officers have attended workshops and presentations of student work exploring the issues of urban design with respect to inequalities under the MCC Joint Health Unit's Valuing Older people programme.'*

118 Clear policy impact of both the Generations Together project and the Sharing the City component can be seen in the inclusion of shared space as a key issue in the legacy report (see [http://www.manchester.gov.uk/download/downloads/id/17517/gt\\_programme\\_review](http://www.manchester.gov.uk/download/downloads/id/17517/gt_programme_review)) as well as the inclusion of the pilot study as a key reference in the MCC 2013-15 Age-friendly Manchester Development plan (Forthcoming).

119 ESRC Conferencing fund for an International research network on age-friendly cities. I am Co-investigator with Principal investigator Prof Chris Phillipson.

120 Early career funding from Faculty research body - Manchester Institute for Research In Art and Design to support development of research trajectory

121 Joint funded by Manchester Interdisciplinary Centre for Research into Ageing and Cities@Manchester both at the University of Manchester. Funding for dissemination of ageing research and to support participation in developing research projects in the subject area.

122 The index of multiple deprivation is a basket of measures brought together by the Office of the National Statistics from census data in an attempt to indicate where people most deprived of opportunities in terms of longevity, activity and services live.

123 As an example of the indirect inter-relation between the students projects and these council departments, the VOP model is now in the process of being replicated as part of a Valuing Younger People project – a development promoted and greatly influenced by the work of Scott Bearman a student of the projects unit who became an active member of the UK youth council as part of his project work.

124 This can occur in terms of two key types of affect – one in relation to time (time-affect) and one in relation to movement (movement-affect), which are themselves reiterations of the Spinozist understanding of the two-form body when described as dynamic or kinetic. movement-affects are produced when we understand an object to be moving in space through the film, time –affects are produced when we understand that time has passed.

125 In reference to Martha Nussbaum who describes a 'capability model' for social justice derived from a reading of Spinoza. See (Nussbaum 2011).

126 Vivium Zorggroep Weesp, De Hogeweyk Amsterdam. <http://www.vivium.nl/hogeweyk> [Accessed 14/12/13].

127 UK Age-friendly cities conference, Manchester 31/10/13.

128 Although this is something that many students of the projects unit fall into expecting.

129 The civil state is Spinoza's name for the collapse back into the second kind of knowledge from the third.

130 The RIBA plan of work sets out the stages of the architectural process from inception to post-occupancy evaluation, it currently contains no requirement for involvement with local democratic processes.

131 Manchester Inter-disciplinary Centre for Research into Ageing

132 See [http://issuu.com/matthewhargreaves/docs/chorlton\\_for\\_all\\_ages](http://issuu.com/matthewhargreaves/docs/chorlton_for_all_ages) [Accessed 14/12/13].

133 Anonymity was maintained for data that was gathered directly by the research team but the multiple forums gave opportunities for information to become shared with a wider group of people.



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[http://www.greatbuildings.com/cgi-bin/gbc-drawing.cgi/Carpenter\\_Center.html/Carpenter\\_Center\\_Plan6.jpg](http://www.greatbuildings.com/cgi-bin/gbc-drawing.cgi/Carpenter_Center.html/Carpenter_Center_Plan6.jpg); [and] [/cid\\_1163422235\\_Picture\\_226.html](http://www.greatbuildings.com/cgi-bin/gbc-drawing.cgi/Carpenter_Center.html/cid_1163422235_Picture_226.html) [Accessed 15/04/11].
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